Architecture Program Report-Candidacy

Universidad Peruana de Ciencias Aplicadas

March 30, 2022

NAB

National Architectural Accrediting Board, Inc.



Architecture Program Report-Candidacy (APR-C)

2020 Conditions for Accreditation 2020 Procedures for Accreditation

Institution	Universidad Peruana de Ciencias Aplicadas - UPC
Name of Academic Unit	School of Architecture
Degree(s) (check all that apply)	⊠ Bachelor of Architecture
Track(s) (Please include all tracks offered by	Track: Bachelor of Architecture + 200 credits
the program under the respective degree, including total number of credits. Examples:	□ <u>Master of Architecture</u>
150 semester undergraduate credit hours	Track:
Undergraduate degree with architecture	Track:
major + 60 graduate semester credit hours	□ <u>Doctor of Architecture</u>
Undergraduate degree with non-	Track:
architecture major + 90 graduate semester credit hours)	Track:
Application for Accreditation	Continuation of Candidacy
Year of Previous Visit	2019
Current Term of Accreditation (refer to most recent decision letter)	Initial Candidacy
Program Administrator	APO Maria Sagami
	Program Director
Chief Administrator for the coordomic unit in	
which the program is located	ARQ. Miguel Cruchaga
(e.g., dean or department chair)	
Chief Academic Officer of the Institution	Mrs. Milagros Morgan
	Vice-Rector for Academic Affairs and Research
President of the Institution	Mr. Edward Roekaert Embrechts
	Rector - CEO
Individual submitting the APR	Mrs. Danitza Huidobro
	Chief of Standards and Self-evaluation,
	Quality Assurance Office
Name and email address of individual to	Mrs. Danitza Huidobro
whom questions should be directed	danitza.huidobro@upc.pe

Submission Requirements:

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

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INTRODUCTION

Progress since the Previous Visit (limit 5 pages)

Program Response:

The VTR-2019 identified nine opportunities for improvement for the program. Considering the correlation between the new 2020 accreditation conditions and the 2014 conditions, the School of Architecture decided to implement relevant actions and improvements.

Regarding the improvement opportunities, referred to the Student Performance Criteria (SPC) as defined in the 2014 Conditions, they were analyzed considering its correspondence and/or similarity with the new PC and SC of the 2020 Conditions, and integrating the latter to the definitions of the Program Learning Outcomes that the architecture program develops and evaluates. Appendix I.1¹ presents the table showing the correlation between the SPC (2014 conditions) - PC and SC (2020 conditions) - Program Learning Outcomes of the UPC architecture program.

The actions and improvements implemented are presented as follows.

<u>I.2.1 Human Resources and Human Resource Development: [X] In Progress</u>

"As stated in the APR, the program has 287 faculty members instructing 4051 students (14 to 1 ratio). The workloads of the full-time and part-time faculty are regulated to ensure a balanced distribution of the faculty responsibilities regarding teaching, research, and student advising. While the program does not currently have an Architect Licensing Advisor, they are aware of the need"

Program Response: As of August 2021, Arch. John Hertz has been appointed as Architect Licensing Advisor; his CV is attached in Appendix I.2² and his registration before the NCARB has been arranged, see Appendix I.3³. More details on this subject are presented later in section 5.4. Human resources.

I.2.4 Information Resources: [X] Not Demonstrated

"Given the large number of students and a much smaller number of titles/volumes, it is not clear to the team that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in the field of architecture. It is for this reason that the team cites this criterion as not demonstrated at this time."

Program Response: Compared to 2018, by 2021 the School of Architecture has increased by 83% in the number of physical publications and by 171% in the number of electronic publications, having even doubled the number of subscribed digital databases.

In the 2019 APR, the information resources reported for the architecture program reached 4,664 publications (physical and electronic), while by 2021 it has a total of 10,343 publications titles (physical and electronic) distributed as indicated in Appendix I.4⁴, showing a significant improvement.

This significant improvement in the availability of resources by 2021 is also evident when analyzing the following figures: while the number of students has increased by 9%, the per capita percentage of physical publications titles has increased by 68%; the per capita percentage of physical publications copies has increased by 31% and the per capita percentage of electronic publications has increased by 155%. A more detailed description of this APR is provided in item 5.8 Information Resources.

¹ Appendix I.1: SPC, PC&SC and Program Learning Outcomes Integration Matrix

² Appendix I.2: Curriculum Vitae - John Hertz (ALA)

³ Appendix I.3: NCARB e-mail registration of UPC-ALA

⁴ Appendix I.4: Physical and Digital Resources – Architecture Program

SPC A.2 Design Thinking Skills: [X] Not Yet Met

"Evidence of student achievement at the prescribed level was not found in student work prepared for AR252 TX-Thesis Workshop. Although the projects for this course provide evidence of effective graphic representation skills and comprehensive final design solutions, they do not provide tangible evidence of the process leading to the final design solution and the ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach wellreasoned conclusions, and test alternative outcomes against relevant criteria and standards."

<u>Program Response:</u> As of the 2021-1 term, the School of Architecture has implemented the following improvements:

- A mandatory Portfolio and Log requirement has been included in all of the ten design workshops of the program, This requirement is established in order to support each work included, by making explicit the process that leads to the solution of the design proposals, as well as the reasoning that leads to them. Examples of these portfolios and logs can be reviewed in Appendices 1.5⁵, 1.6⁶, 1.7⁷, and 1.8⁸ below.
- In the course Workshop X Thesis Workshop (AR304), the final activity requires a "Work Specifications" document with the theoretical support of the submitted preliminary project, in which the relationship between the design criteria, previously established based on the objective analysis of the requirements of the work, and the final result is explained. In Appendix I.9⁹ the course syllabus describing the above is attached.
- Finally, each student's project keeps a detailed trace of the process leading to the final design solution, as can be seen in Appendix I.10¹⁰, Critique Worksheets, Workshop X 2020.

SPC A.8 Cultural Diversity and Social Equity: [X] Not Yet Met

"Evidence of student achievement at the prescribed level was not found in student work prepared for the courses cited by the program in their matrix: AR158 Urban Planning and AR251 Urban Management. Some work demonstrated achievement at the understanding level for some of the aspects of cultural diversity (diverse needs, social and spatial patterns), but the team could not find evidence of student work that explored social equity or the remaining aspects of cultural diversity".

<u>Program Response</u>: SPC A.8, is linked to PC8, "Social Equity and Inclusion" and is part of the program-specific learning outcome "Grounded Design" (Appendix I.1¹¹).

As of the 2021-1 term, the understanding of cultural diversity and social equity is articulated with Workshop VIII - Architecture and Cities (AR301), and is evaluated by means of a rubric in which the understanding of diverse social and cultural contexts, leading to the approach of building inclusive environments, is proposed as a criterion to be evaluated. This rubric can be reviewed in the attached Appendix I.11¹².

Furthermore, SPC A.8, as well as PC 8, are reinforced in their understanding through the values that we share and promote as a School and institution. More details on this subject are presented later in section 2. Shared Values of the discipline and profession.

SPC B.2 Site Design: [X] Not Yet Met

"Student work prepared for AR249 TVIII-Architecture and Cities and AR217 TV Architecture and the Environment provide evidence of ability to respond to urban context and developmental patterning. The team did not find consistent evidence of ability to respond to topography, ecology, climate, and building orientation in the development of a project design."

⁵ Appendix I.5: Student Portfolio T10 u201618888

⁶ Appendix I.6: Student Portfolio T10 u201714587

⁷ Appendix I.7: Student Log T8 u201110185

⁸ Appendix I.8: Student Log T8 u201513241

⁹ Appendix I.9: Syllabus Workshop X – Thesis Workshop (AR304)

¹⁰ Appendix I.10: Critique Worksheets Workshop X – 2020

¹¹ Appendix I.1: SPC, PC&SC and Program Learning Outcomes Integration Matrix

¹² Appendix I.11: Rubric Workshop VIII - Architecture and Cities (AR301)

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<u>Program Response</u>: The School of Architecture has designed and implemented the following improvements and actions:

- SPC B.2 is related to PC3, from the 2020 conditions, and is embedded in the program-specific learning outcome: "Grounded Design", that has been articulated with the Workshop V Architecture and the Environment (AR309) course. In this course, students are required to carry out and support a project with a holistic understanding of how the built environment modifies and impacts the natural environment. See syllabus in Appendix I.12¹³ and the rubric in Appendix I.13¹⁴.
- In the Architectural Analysis (AR335) course the content and syllabus have been redefined, incorporating: knowledge of the formal, functional, and technical aspects, the study of the conditions of habitability, safety, and relationship with the environment that are part of an architectural work, as well as the codes, norms, regulations, and standards that apply to them. See syllabus in Appendix I.14¹⁵
- In the course Preliminary Works (AR340), the syllabus is modified by introducing contents related to the theory and practice of Topography. This course includes among its outcomes the search for a comprehensive understanding of the work through the study of environmental conditioning techniques, adaptation to the environment and topographic survey information, for its application in the architectural project. See Appendix I.15¹⁶
- A new subject has been added to the program: Sustainability and Environment (AR338), aims for students to become aware of the role citizens have in developing a sustainable professional practice, generating a critical vision of the causes and effects of climate change, and the importance of using energy-efficiency systems and resource management in all areas to minimize negative impacts and ensure the habitability of the planet for future generations. See syllabus in Appendix 1.16¹⁷

SPC B.3 Codes and Regulations: [X] Not Met",

"Evidence of student achievement at the prescribed level was not found in student work prepared for the course cited by the program in their matrix: AR247 Professional Project Guidelines. Some of the exams completed for the Structural Modeling I & Structural Modeling II courses reference structural codes, but it is not evident to the team that students are being exposed to building codes, regulations, life safety, and accessibility at the site and building scale"

Program Response: SPC B3, of the 2014 conditions, is linked to SC.3, Regulatory Context, of the 2020 conditions. In this context the improvements and actions implemented are detailed below:

- In the subject Workshop IX Professional Practice Workshop (AR302) is included, since term 2021-2, training in the use of codes and regulations in the U.S., with students carrying out for this purpose a project located in the U.S. See syllabus in Appendix I.17¹⁸ and the rubric of the project in Appendix I.18¹⁹.
- Training workshops on codes and regulations in the U.S, conducted by the ALA, Arch. John Hertz, were implemented for all the teachers of Workshop IX, as well as advising sessions for students. The schedule of these activities is presented in Appendix I.19²⁰.

SPC B.4 Technical Documentation. [X] Not Met"

"The team was unable to find consistent demonstration of student achievement at the prescribed level, particularly but not limited to those marked as low pass. The early evidence of technical documentation presented in Terms 2 and 3, identified by the program as secondary sources, shows more consistency, but on much smaller drawing projects and that consistency does not translate

¹³ Appendix I.12: Syllabus Workshop V - Architecture and the Environment (AR309)

¹⁴ Appendix I.13: Rubric Workshop V - Architecture and the Environment (AR309)

¹⁵ Appendix I.14: Syllabus Architectural Analysis (AR335)

¹⁶ Appendix I.15: Syllabus Preliminary Works (AR340)

¹⁷ Appendix I.16: Syllabus Sustainability and Environment (AR338)

¹⁸ Appendix I.17: Syllabus Workshop IX - Professional Practice Workshop (AR302)

¹⁹ Appendix I.18: Rubric Workshop IX - Professional Practice Workshop (AR302)

²⁰ Appendix I.19: ALA schedule for training and advisory on Codes and Regulations in the US

to the later design studio work. The team also did not find evidence of ability to prepare outline specs. Understanding that this form of documentation may not be customary in Peru, it is nevertheless a specific requirement of the current Conditions."

Program Response: SPC B4 is among the particular characteristics of SC.4 Technical Knowledge of the 2020 conditions. Consequently the new specific outcome incorporated into the program includes it: "Technique and Construction," which is oriented to the application of technological systems and construction methods according to design, economy and performance criteria.

To improve the student's ability to handle technical documentation, the following courses were updated and aligned with the Technique and Construction outcome: Architectural Drawing (AR351), Understanding CAD (AR342) and Workshop IX - Professional Practice Workshop (AR302). See each syllabus in Appendix I.20²¹. I.21²² and I.17²³.

Additionally, the School is considered to enable an additional specialization mention: "Graphic Expression," this mention consists of a set of five courses in which different explorations on the use of color, materiality, typography, form and composition are carried out aiming to provide students with complementary skills that are incorporated into their training. See Appendix I.22²⁴.

Furthermore, the project "Glossary for architectural graphic representation" is being developed as an initiative of the school's manual and digital graphics courses, which are considered as providers of tools and instruments that materialize the creative and transversal activity to all the other courses of the school.

SPC B.7 Building Envelope Systems and Assemblies: [X] Not Yet Met.

"While there is stronger evidence of contact with this topic within the project notebooks, the team was unable to find consistent evidence of student achievement at the prescribed level, within the final project results demonstrated in the team room, particularly within low level but also on some high pass work."

Program Response: SPC B.7, is among the particular characteristics of SC.4 Technical Knowledge of the 2020 conditions. And it's included in the specific learning outcome incorporated into the program: "Technique and Construction," oriented to the application of technological systems and construction methods according to design, economy and performance criteria.

The following subjects were defined as validation courses to evidence the expected achievement: Structural Modeling II (AR341), Lightweight Roofing and Formwork (AR346) and Workshop X - Thesis Workshop (AR304). See syllabus and rubrics in Appendices 1.23²⁵, 1.24²⁶, 1.25²⁷, 1.26²⁸, 1.9²⁹, and 1.27³⁰.

In addition, , a change of focus and name has been implemented regarding the subject Wood Finishes and Technology, now called Wood Construction and Finishes (AR348). The current approach focuses on the study of the use of wood and its derivatives in the construction elements themselves. See syllabus in Appendix I.28³¹, and educational material in Appendix I.29³².

SPC B.9 Building Service Systems: [X] Not Yet Met

"In AR98 Special Equipment and Installations, the team found evidence of understanding of mechanical systems in the projects provided, but could not find evidence for plumbing, electrical,

²¹ Appendix I.20: Syllabus Architectural Drawing (AR351)

²² Appendix I.21: Syllabus Understanding CAD (AR342)

²³ Appendix I.17: Syllabus Workshop IX - Professional Practice Workshop (AR302)

²⁴ Appendix I.22: Mention in Graphic Expression

²⁵ Appendix I.23: Syllabus Structural Modeling II (AR341)

²⁶ Appendix I.24: Rubric Structural Modeling II (AR341)

²⁷ Appendix I.25: Syllabus Lightweight Roofing and Formwork (AR346)

²⁸ Appendix I.26: Rubric Lightweight Roofing and Formwork (AR346)

²⁹ Appendix I.9: Syllabus Workshop X – Thesis Workshop (AR304)

³⁰ Appendix I.27: Rubric Workshop X - Thesis Workshop (AR304)

³¹ Appendix I.28: Syllabus Wood Construction and Finishes (AR348)

³² Appendix I.29: Educational Material – Wood Construction and Finishes (AR348)

communication, vertical transportation, security, and fire protection systems. In the SPC matrix the program cited AR215 Installations in Buildings as the primary source of evidence; however, the team found no evidence of student work in the provided digital files, course notebooks and other work in the team room. The course description makes note of the missing building service systems, but the team had no student work to review to see that this SPC was met by that course."

Program Response: When analyzing SPC B.9 it was established that it is part of the characteristics of SC.4 Technical Knowledge, which as previously mentioned has been included in a new specific program outcome of the program: "Technique and Construction".

Being redefined the assignments of the courses of Installations in Buildings (AR293) and Special Equipment and Installations (AR318) requiring in both cases the delivery of drawings of installations of a small building. See the attached syllabus in Appendix I.30³³ and Appendix I.31³⁴.

SPC C.2 Integrated Evaluations and Decision Making Design Process: [X] Not Yet Met

"This SPC is not yet met. Evidence of student achievement at the prescribed level was not found in student work prepared for the courses identified by the program in the matrix: AR250 TIX – Professional Practice Workshop (studio course) and AR252 TX – Thesis Workshop (studio course). The team was able to find some evidence of evaluation and decision making in some work, but it was not consistent, not evident in low pass work, and not to the ability level. This was also due to the lack of student process work.

Program Response: After analyzing the SPC.C.2 the requirement of a Portfolio and a Log in order to support each work included, making explicit the process, reasoning and decisions that lead to the solution of the design proposals was implemented in all of the program design workshops.

The Student Portfolio is a record that is made throughout the entire career with their best achievements in the subjects and mainly in the Architectural Design Workshops. Consequently, each student will have a record that documents their entire journey through the program. While the Student Log is the record that the student prepares regarding the work process developed within each of the Architectural Design Workshops they take. Examples of these portfolios and logs can be reviewed in Appendices 1.5³⁵, 1.6³⁶, 1.7³⁷, and 1.8³⁸ below.

SPC C.3 Integrative Design: [X] Not Met.

"The team was not able to find evidence of student achievement at the prescribed level within the student work prepared for the course indicated within the matrix. The team then looked at work of other terms, particularly Term 10, which is identified as the final / thesis project and were not able to find evidence which was consistent across all projects or between high/low pass examples."

Program Response: SPC C.3, the School, is related to SC.5 Design Synthesis of the 2020 conditions, which has been included in a new specific competency of the program: "Grounded Design," which is articulated and integrated as an evaluation criterion of the10 design workshops of the program. See the rubric In Appendix I.32³⁹, the program's design workshops description in Appendix I.33⁴⁰ and the Workshop X – 2020 Critique Worksheets in appendix I.10⁴¹.

SPC D.2 Project Management: [X] Not Yet Met.

"Evidence of student achievement at the prescribed level was not found in student work prepared for the courses cited by the program in their matrix: AR248 Real Estate Management and AR223 Professional Synergy. The team found evidence of understanding of the assembly of teams, but not work plans, project schedules, time requirements, and project delivery methods."

³³ Appendix I.30: Syllabus Installations in Buildings (AR293)

³⁴ Appendix I.31: Syllabus Special Equipment and Installations (AR318)

³⁵ Appendix I.5: Student Portfolio T10 u201618888

³⁶ Appendix I.6: Student Portfolio T10 u201714587

³⁷ Appendix I.7: Student Log T8 u201110185

³⁸ Appendix I.8: Student Log T8 u201513241

³⁹ Appendix I.32: Rubric Grounded Design

⁴⁰ Appendix I.33: Structure, description and objectives of the program's Design Workshops

⁴¹ Appendix I.10: Critique Worksheets Workshop X – 2020

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Program Response: SPC D.2 is related to SC.2 Professional Practice, from the 2020 conditions, which has been included in a new program-specific learning outcome: Professional Management, aligned to a new subject introduced in the program, Project Management (AR350). The course focuses on the aspects referred to work plans, project schedules, time requirements and project delivery methods, as can be reviewed in the syllabus presented in Appendix I.34⁴².

Program Changes

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

Program Response: As a result of changes in the accreditation conditions the following improvements were implemented by the program:

The School of Architecture, after a thorough process of comparative analysis of its Architecture program and the Program Criteria (PC) and Student Criteria (SC), as defined by NAAB in the 2020 Conditions, has made the decision to incorporate the latter into the various dimensions of its Program Learning Outcomes to be developed and assessed throughout the Architecture program: Grounded design, Technique and Construction, Architectural Culture and Professional Management. Consequently, the Program Learning Outcomes have been incorporated into the continuous evaluation process of the program.

Appendix I.34⁴³ shows the articulated program curriculum for PC/SC and appendix I.35⁴⁴ provides a table that shows the correlation between PC and SC (2020 conditions) - the Program Learning Outcomes of UPC's Architecture program and in the courses/activities in which they are evaluated. Consequently the SC and PC achievement evaluation is incorporated into the program assessment process.

In this context, at the curricular map course level, the program decided to implement the following improvements:

New subjects included:

- Sustainability and Environment (AR338): This course, aligned to PC3, allows students to become aware of the role of citizens in the development of a sustainable professional practice, thus fostering a critical vision of the causes and effects of climate change and the importance of the application of energy efficiency and resource management systems in all areas, in order to reduce the negative impacts on the environment and ensure decent living conditions for future generations on earth. See syllabus attached in Appendix I.16⁴⁵
- **Research Methodology (AR347):** This course, aligned with PC5, provides students with methodological foundations and tools related to scientific research, bringing them closer to the research process, so as to develop skills and abilities in the handling of conceptual tools and research techniques that facilitate the search for and organization of knowledge. See syllabus attached in Appendix I.36⁴⁶.
- **Project Management (AR350):** Managing and developing a project involves professionals from different disciplines; therefore, in the case of projects involving architects, they must interact with other professionals from different fields of specialty, as well as clients, neighbors and other people who directly or indirectly contribute to the final result. In this course, aligned with PC.2, students must identify and analyze different aspects used to manage and develop a project, and become familiar with the basic principles of business practices, manage relationships between stakeholders involved or affected by the design process, and critically

⁴² Appendix I.34: Syllabus Project Management (AR350)

⁴³ Appendix I.35: NAAB PC/SC Matrix

⁴⁴ Appendix I.36: PC&SC, PLO and Courses/Activities Integration Matrix

⁴⁵ Appendix I.16: Syllabus Sustainability and Environment (AR338)

⁴⁶ Appendix I.37: Syllabus Research Methodology (AR347)



analyze any ethical and regulatory issues arising in the professional practice. See syllabus attached in Appendix I.33 , $^{\rm 47}$

Updates/changes in content:

• Architectural Analysis (AR335), former Architectural Analysis and Topography (AR316), which has incorporated content related to the knowledge of formal, functional and technical aspects, the study of the conditions of habitability, safety and relationship with the environment that make up an architectural work, as well as the codes, norms, regulations and standards that apply to them, as shown in the attached syllabus in Appendix I.14⁴⁸. The previous topography content was transferred to the Preliminary Works (AR340) course.

Finally, the program decided to enable an additional specialization mention: "Graphic Expression", this mention consists of a set of five courses in which different explorations on the use of color, materiality, typography, form and composition are carried out aiming to provide students with complementary skills that are incorporated into their training. See Appendix I.37⁴⁹.

As a result of changes in the program, its courses and their current and former codes are listed in table I.1.

Curricular Map (42)	Code	Former Code	Comments
Artistic and Spatial Expression	AR287	AR287	
Basic Mathematics	MA618	MA618	
Workshop I - Introduction to Architectural Design	AR305	AR305	
Ethics and Citizenship	HU548	HU548	
Differential Calculus	MA619	MA619	
Architectural Drawing	AR351	AR286	Credit adjustment
Physics	MA651	MA651	
Introduction to Architecture	AR01	AR01	
Workshop II - Architecture and Art	AR334	AR306	Credit adjustment
Architectural Analysis	AR335	AR316	Former AR316 Architectural Analysis and Topography. Topography was included in AR340 Preliminary Works
Art and Architecture from Ancient Times to the Middle Ages	AR336	AR84	Credit adjustment
Integral Calculus	MA621	MA621	
Structural Modeling I	AR337	AR213	Credit adjustment
Workshop III - Architecture and Surroundings	AR307	AR307	
Art and Architecture from the Middle Ages to the Renaissance	AR339	AR87	Credit adjustment
Understanding CAD	AR342	AR243	Course name updated.
Structural Modeling II	AR341	AR212	Credit adjustment

Table I.1: Program curricular map course code changes.

⁴⁷ Appendix I.34: Syllabus Project Management (AR350)

⁴⁸ Appendix I.14: Syllabus Architectural Analysis (AR335)

⁴⁹ Appendix I.22: Mention in Graphic Expression

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Curricular Map (42)	Code	Former Code	Comments
Preliminary Works	AR340	AR300	Topography, from former AR316 Architectural Analysis and Topography was included in this course
Sustainability and Environment	AR338	AR261	Credit adjustment
Workshop IV - Architecture and	AR308	AR308	
Functionality			
Masonry	AR344	AR294	Course name updated
Art and Architecture from Baroque to Art Nouveau	AR343	AR39	Credit adjustment
Language Comprehension and Production I	HU543	HU543	
Installations in Buildings	AR293	AR293	
Workshop V - Architecture and Environment	AR309	AR309	
Peruvian Architecture	AR110	AR110	
Modern and Contemporary Art and Architecture	AR345	AR162	Credit adjustment
Research Methodology	AR347		Replaces AR266 Academic Research Seminar I and AR269 Academic Research Seminar II
Workshop VI - Architecture and Construction	AR313	AR313	
Lightweight Roofing and Formworks	AR346	AR291	Course name updated
Wood Construction and Finishes	AR348	AR317	Course name updated
Conservation of the Immovable Cultural Heritage	AR161	AR161	
Workshop VII - Integration Workshop	AR310	AR324	Credit adjustment
Urban Planning	AR284	AR284	
Special Equipment and Installations	AR318	AR318	
Urban Management	AR303	AR303	
Research in Architecture	AR349	AR311 / AR246	Prerequisite course change
Workshop VIII - Architecture and Cities	AR301	AR301	
Project Management	AR350		Replaces Real Estate Management (AR248) and Professional Synergy (AR295)
Professional Project Guidelines	AR271	AR247	Prerequisite course change
Urban Planning Seminar	AR272	AR272	
Workshop IX - Professional Practice Workshop	AR302	AR302	
Workshop X - Thesis Workshop	AR304	AR304	
Theory of Architecture	AR112	AR112	



NARRATIVE TEMPLATE

1—Context and Mission

1.1 Program Response:

1.1.a <u>UPC's Institutional context:</u> Created in 1993⁵⁰, in Lima, Peru, Universidad Peruana de Ciencias Aplicadas (UPC) is an innovative, private and research comprehensive educational institution, aimed at providing higher education programs, at the undergraduate and graduate levels, which stand out for its academic quality, alignment with the labor market demands and for offering students a rigorous, meaningful, and integral educational experience that promotes scientific and technological research as well as cultural, intellectual, and artistic knowledge.

UPC's mission: "to educate upstanding and innovative leaders with a global vision who will transform Peru" is the foundational commitment that guides and inspires all actions within the institution. Periodically, UPC's top management conduct a review of the institutional mission statement with its stakeholders, to ensure its currency, suitability and that it clearly defines the essential values and attributes that better explain how UPC contributes to the transformation of Peru and the public good.

UPC aspires "to be at the forefront in higher education for academic excellence and innovative capability". To achieve its mission and vision, UPC has defined the following core values: Leadership, teamwork, service, excellence, and innovation. These represent the DNA of UPC's institutional culture, which guides the decisions and performance of faculty and staff.

These 27 years were full of challenges and accomplishments, as presented in the timeline in appendix 1.2⁵¹. Currently, UPC offers 61 bachelor's degree programs through its 13 Schools: Architecture, Business, Communications, Contemporary Arts, Design, Economics, Education, Engineering, Health Sciences, Hospitality and Tourism Administration, Human Sciences, Psychology, and Law and 38 master's degree programs.

UPC has four locations in Lima, Peru main city: Monterrico (main campus - <u>link</u>), San Isidro (<u>link</u>), San Miguel (<u>link</u>) and Villa (<u>link</u>).

1.1.b <u>UPC's School of Architecture</u>: The School of Architecture was one of the "founding" schools of the university. Its built-in process involved an analysis to compare the characteristics of the most representative Architecture programs in Peru and in the world at that time, defining relevant guidelines for the new UPC School of Architecture that would begin its activities in 1994.

UPC's School of Architecture sets its focus in developing the aptitudes of the students to understand, conceive, design and execute buildable projects in the context of the professional practice of architecture. In this approach, reason, emotion, intuition and knowledge of history must come together with balance to shape physical forms that respond adequately to the needs of both society and the individual.

In this sense, the School of Architecture's vision consists in being recognized for educating professionals in Architecture with the highest professional skills and leadership in the transformation of Peru, whereas the mission aims to educate professionals, leaders and

⁵⁰ Appendix 1.1: Law N°26276 Creation of Private Universities

⁵¹ Appendix 1.2: UPC a History of excellence



innovators with a global vision to generate value through the professional practice of architecture and contribute to transforming Peru.

With this commitment, the School implements a diverse approach, characterized by offering students a broad and multidimensional vision of the architectural work in the contemporary world, favoring the broadest academic freedom, and giving the student a more complete, global and free vision of what the realization of the architectural project implies in the contemporary world.

The bachelor program is offered in three of the four UPC campuses: Monterrico Campus (since 1994), Villa Site (since 2013) and San Miguel Site (since 2015). The total amount of students enrolled in the program in the 2021-2 academic term, was 4,837, distributed as follows: 48% at the Monterrico Campus, 16% at the Villa Campus and 36% at the San Miguel Campus. Also 84% of the students enrolled in the program are from Lima, Peru's main city, and 16% are from different cities in the country. In appendix 1.3⁵² the students distribution per campus is presented.

The delivery format of UPC's Architecture bachelor program is on-campus, but in 2020, due to the COVID pandemic, when the Peruvian government declared a state of emergency and the mandatory lockdown, UPC was prepared to face the challenge of providing virtual synchronic education and focused all its efforts on ensuring the academic continuity of the students. The university robust technological infrastructure (Blackboard), the well-trained faculty in digital competencies, as required by UPC's faculty educational model and the willingness of all the faculty, staff and executive management to face the new challenges imposed by the sanitary emergency led UPC to prepare all its processes to online delivery to continue with UPC's mission.

This year, 2022, it is expected the Peruvian Government to authorize and release the official protocols and regulations for going back to campus.

1.2 Program Response: The Architecture bachelor program highly represents UPC, providing it a relevant presence in the national educational and cultural environment. Some examples of the activities and initiatives that show the benefits that the program provides to the institution are presented in appendix 1.4⁵³.

In addition, there are benefits to the School of Architecture and its bachelor program deriving from the institutional context of UPC and its culture of quality, excellence and continuous improvement.

The horizon of internationality is extended through framework agreements that UPC develops and keeps with other institutions (link).

The corporate areas for program support with a high performance and commitment level, such as the Departments of Educational Quality, Quality Assurance, Knowledge Management, Career Services, etc. The financial strength and support for the execution of program activities, as well as its initiatives and projects, the appropriate and broad infrastructure with suitable facilities, resources and services.

⁵² Appendix 1.3: Architecture School Student Distribution 2021-2

⁵³ Appendix 1.4: School of Architecture international events 2018-2021

NAVAB

- **1.3 Program Response:** The following are some activities that generate learning opportunities inside and outside the classroom:
 - Construction Labs: Architecture students use construction labs at each campus for our different construction-related program courses. This allows students to actively take part in their own learning and experience being in a construction work area.
 - **Exhibitions:** students and faculty are able to become involved and interrelate through different exhibitions, conducted regularly during the academic terms.
 - **Academic Missions:** these academic trips proposes students and faculty pedagogical experiences to live in situ the development of the profession in different scenarios. The description of each academic mission is presented in appendix 1.6⁵⁴.
 - **Pre-professional internships (mandatory):** aimed at allowing students to apply their acquired knowledge and competencies through experiencing a real work situation.
 - **Extracurricular activities:** UPC's University Life Department is in charge of managing extracurricular activities offered at an institutional level to complement academic education by developing co-curricular learning outcomes. As part of the requirements to obtain the Bachelor's academic degree, students must earn four extracurricular credits.

Summary Statement of 1 – Context and Mission

Program Response:

UPC was established by law in 1993 and launched its first admission process in 1994. The School of Architecture was one of the "founding" Schools.

UPC is an innovative, private and research comprehensive educational institution, aimed at providing higher education programs, at the undergraduate and graduate levels, which stand out for its academic quality, alignment with the labor market demands and for offering students a rigorous, meaningful, and integral educational experience that promotes scientific and technological research as well as cultural, intellectual, and artistic knowledge. UPC is an institution committed to its culture of academic quality, excellence and continuous improvement.

It's mission is to "educate upstanding and innovative leaders with a global vision who will transform Peru" and it's vision: "to be at the forefront in higher education for academic excellence and innovative capability".

The school mission aims to educate professionals, leaders and innovators with a global vision to generate value through the professional practice of architecture and contribute to transforming Peru. It is focused on developing student aptitude to understand and conceive design and execute buildable projects within the context of the practice of architecture.

With this commitment, the School implements a diverse approach, characterized by offering students a broad and multidimensional vision of the architectural work in the contemporary world, favoring the broadest academic freedom, and giving the student a more complete, global and free vision of what the realization of the architectural project implies in the contemporary world.

⁵⁴ Appendix 1.5: Architecture Academic Missions

2—Shared Values of the Discipline and Profession

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

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

Program Response: Design as a value is part of the architecture program and therefore of the education of all its students. This value integrates one of the program learning outcomes that the architecture program develops in the students: "Grounded Design."

The "Grounded Design" is a learning outcome oriented to all students to design and base their architectural proposals on a previous research and integrate all the variables involved in the architectural project. As shown in Appendix 2.1⁵⁵, which presents the correlation between the PC and SC of the accreditation conditions 2020 and Program Learning Outcomes, this outcome is built on the basis of PC2 Design, PC3 Ecological Knowledge and Responsibility, PC5 Research and Innovation, PC8 Social Equity and Inclusion, SC3 Regulatory Context and SC5 Design Synthesis.

This competence is articulated to the 10 architectural design workshops that compose the program curriculum and that are developed from the first term.

The architectural design workshops are the core of the architecture program, they are the basis for the organization of the teaching of the program, they are taught throughout the 10 academic terms of the program and are the space where the theoretical knowledge of the subjects of the different training areas is applied. In Appendix 2.2⁵⁶ we present the structure, description and objectives of the program's design workshops, in order to explain our approach to the teaching of Design.

The academic areas that support this process are: the area of History and Human Sciences, which allows the student to become familiar with the humanistic contents of the architectural discipline; the area of Basic Sciences and Construction, where we can find the subjects that provide technical knowledge and concepts of structures and building, with emphasis on the topic of structural safety.

Starting in the fourth term of the program, a sequence of construction workshops is organized to complement theory with building practice, exploring on site the aspects of preliminary works, masonry, roofing and light coverings, and timber construction and finishes, each one of these topics corresponds to a specific workshop. In this set of workshops, the requirements of safety and organization in the construction process are experimented in a practical way.

Our workshops favor diversity, as the size of our School is a strength that allows the presence in the various sections of the design workshops of the most diverse approaches to the way of facing the design task, at all levels. This generates and fosters in the students free thinking and the ability to respond individually, creatively and circumstantially to different scenarios that they may face when exercising their profession.

With regard to evaluation, this is carried out every term during the workshops tour, where the projects developed during the term are presented to the dean, the program director and the faculty members of the course, for discussion; in a search for continuous improvement. In addition, this value is evaluated as part of the Workshop X - Thesis Workshop (AR304) course, in which the

⁵⁵ Appendix 2.1: PC&SC, PLO and Courses/Activities Integration Matrix

⁵⁶ Appendix 2.2: Structure, description, and objectives of the program's Design Workshops.

evaluation is carried out in line with what is established by the PC2. Design and SC5. NAAB Design and Synthesis.

In order to evaluate and establish the current status regarding teaching value, defining improvements and setting a goal for the next academic period, the School uses the results obtained in the Workshop X - Thesis Workshop course (AR304), an evaluation carried out in terms of the NAAB criteria PC2 Design and SC5 Design Synthesis for the 2021-2 term, which shows that the level of achievement for PC2 is 56.9% and for SC5 is 70%, having established as a goal for the next academic period to increase the level of achievement of PC2 to 60% and SC5 to 75%.

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

Program Response: At the institutional level, UPC's Educational Model (<u>link</u>) is based on five pedagogical principles that underpin its actions and educational processes, one of which is Learning towards sustainability: *"Education, as a process by which human beings and societies can reach their full potential, is decisive in favoring sustainable development (UNESCO, 2015). UPC is focused on the education of people and professional leaders capable of transforming their environment through innovative processes and means towards sustainability. In this way, they will contribute to the country's sustainable development. The relations kept by the university with different stakeholders in its various processes allow it to respond —based on its academic proposals— to the economic development, social well-being and environmental protection."*

Within this context, the School of Architecture is committed to training in values that will lead future professionals to fulfill their commitments to society, the city, their country, and the world, emphasizing the need for a built environment that must be conceived in terms of environmental sustainability, as well as the health and safety of its users and society in general.

Aspects of ethics and professional responsibility are worked on early in the program, starting in the first term in the Ethics and Citizenship (HU548) subject, where cases arising from current issues are analyzed and discussed in a critical manner, as can be seen in the syllabus attached in Appendix 2.3⁵⁷.

Professional responsibility towards the natural world, public health, safety, and welfare is developed in our students through the following courses:

- Sustainability and Environment (AR338), is a new course that has been included in the program curriculum, and it's content incorporates the value developed in this point, and aims to make the student aware of the role of the citizen in the development of a sustainable professional practice, generating a critical view on the causes, effects of climate change and the importance of the implementation of energy efficiency systems and resource management in all areas, in the search for the minimization of negative impacts on the environment and ensuring the habitability of the planet for future generations. See syllabus in Appendix 2.4⁵⁸
- Architectural Analysis (AR335), which has incorporated content related to the knowledge of formal, functional and technical aspects, the study of the conditions of habitability, safety and relationship with the environment that make up an architectural work, as well as the codes, norms, regulations and standards that apply to them, as shown in the attached syllabus in Appendix 2.5⁵⁹.

⁵⁷ Appendix 2.3: Syllabus Ethics and Citizenship (HU548)

⁵⁸ Appendix 2.4: Syllabus Sustainability and Environment (AR338)

⁵⁹ Appendix 2.5: Syllabus Architectural Analysis (AR335)

N.¹.B

- Workshop V Architecture and Environment (AR309), in this course, students are required to carry out and support a project with a holistic understanding of how the built environment modifies and impacts the natural environment, and as a consequence applying ecological and sustainability principles efficiently focused on mitigating these effects. See syllabus in Appendix 2.6⁶⁰ and the rubric in Appendix 2.7⁶¹.
- **Urban Planning** (AR284) in this course students understand that cities are the result of the agglomeration of people, which poses the challenge of achieving a city with human quality: inclusive, resilient, safe, environmentally responsible and sustainable. This course introduces students to the knowledge of the structure and morphology of the city: the complex dynamics that we as humans generate by interacting economically and socially in its spaces, how we perceive these spaces, how we affect he environment and how the architect sets up city spaces—whether a street, square or some cozy city corner—with the design of its buildings. See syllabus in Appendix 2.23⁶²
- **Urban Management** (AR303) this course encourages reflection on decision-making in everchanging cities, addressing issues such as land appraisal, urban mobility strategies, risk management at the city level, among others, which constitute the fundamental topics of the course, making benchmarking an essential tool that allows for the detection and learning of best urban practices and also of relevant mistakes. See syllabus in Appendix 2.24⁶³

In addition to the above, since the 2021-2 academic term, the School of Architecture has implemented an initiative to promote as an added value of the thesis work of its students to include the architectural "Recycling" topic, meaning the reuse of buildings in disuse, due to their antiquity, for having remained out of place within the urban evolution or due to obsolescence of the function for which it was built. This is a measure that is based, among other considerations, on environmental sustainability.

This initiative is being carried out through the subjects of **Architectural Research (AR246)**⁶⁴ and **Guidelines for Professional Projects (AR271)**⁶⁵, aimed at eighth and ninth-term students, who are proposed to conduct their research, which will later provide the basis for the preparation of their theses, focusing on the main issues for the development and habitability of the country, such as Housing, Health, and Education typologies. This reaffirms and guides the commitment of training new architects with the most urgent needs of the country.

Furthermore, in the guidelines established by the School for developing professional thesis projects, it is specified to respect the regulations for the preservation of green areas, public spaces, safety regulations, and accessibility for the disabled, as well as the regulations regarding the city's historical monuments. All thesis projects are required to prepare a document containing the justification of the decisions taken concerning the selection of the site chosen to locate their proposals, the architectural program they propose, the safety and accessibility regulations, and special regulations depending on the topic in question, considerations that must be based on the analysis of the site, and the corresponding knowledge and evaluation of the social, cultural, and environmental factors of the site.

⁶⁰ Appendix 2.6: Syllabus Workshop V - Architecture and the Environment (AR309)

⁶¹ Appendix 2.7: Rubric Workshop V - Architecture and the Environment (AR309)

⁶² Appendix 2.23: Syllabus Urban planning (AR284)

⁶³ Appendix 2.24: Syllabus Urban management (AR303)

⁶⁴ Appendix 2.8: Syllabus Architectural Research (AR246)

⁶⁵ Appendix 2.9: Syllabus Guidelines for Professional Projects (AR271)

NMB

In appendix 2.10⁶⁶ the memorandum for the implementation of the Thesis Lines for the School is presented.

The assessment of this value has been aligned with the PC.3 evaluation, as presented in Section 3. The current status is 64.2% achieved and the goal is to maintain this figure for the following academic period.

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

Program Response: UPC is made up of talented and diverse students, faculty and administrative staff. Having this diversity in every one of its levels is part of the reasons why UPC has reached recognition levels for its contribution to higher education, to the country's development and to the creation of new knowledge.

UPC has always promoted diversity and is committed to creating an environment free from discrimination or any type of harassment due to race, diversity of opinion, nationality, gender, socioeconomic level, sexual orientation, religion, age, disability or marital status. Diversity is a pillar to the University's fundamental activities. Student selection and faculty and administrative employee recruitment, as well as their acknowledgment and any other benefit or obligation towards them, must not be biased by any of the features mentioned above. As it has been established in its Diversity and Non-Discrimination Policy (link) and its Academic Freedom Policy (link).

Regarding statistical information, UPC is institutionally accredited by WASC Senior College and University Commission - WSCUC, and according to the last annual report submitted, our institution provided the following information on gender diversity; in the School of Architecture, in 2021-2, out of a population of 4837 enrolled students (non-duplicated number), 63.4% are female and 36.6% are male.

Due to the racial and cultural diversity in Peru, asking about a person's race and ethnicity is considered inappropriate and could imply the intent to discriminate based on that information. As a consequence, public or private organizations in any sector do not require or publish information about the race or ethnicity of their members.

Complementary information about these diversity data can be provided from an economic perspective. The University has defined a five-tier payment structure to address the different economic situations of its students. In this regard, Table 2.1 shows the distribution of students in the School of Architecture by tuition payment category in the 2021-2 term.

Table 2.1 Distribution of students in the School of Architecture by payment category Term: 2021-2

Number of enrolled students: 4,837			
Payment category	Percentage		
(Starting from the highest)	-		
Q	0.5%		
R	0.9%		
S	2.7%		
Т	8.3%		
U	87.6%		
TOTAL	100%		

⁶⁶ Appendix 2.10: Memorandum for the implementation of the thesis lines



UPC is committed to the well-being of students and their successful adaptation to the university system, and has an area of Psycho-pedagogical Counseling that provides counseling to students through free access programs and workshops, which serve as support to meet the demands of the university environment and complement the graduate student profile. In the case of the School of Architecture, between 2020 and 2021, 368 students made use of this service.

Additionally, the university has an Accessibility for Students with Disabilities Policy (<u>link</u>) that aims to ensure equal opportunities for students and the "Diversity and Inclusion Program" (PADI), which provides attention and counseling in the academic and socio-emotional level to ensure the comprehensive welfare and inclusion in the university system of students with some type of disability. At the beginning of the term, the Program Director is informed of the list of students with disabilities in order to implement the corresponding accessibility measures in favor of these students, the coordinators of the academic areas are informed as well as faculty members, who have the support of the specialists of the Educational Quality area to carry out the training they may require to provide adequate support to these students.

The School of Architecture and its program promote a respectful learning environment where equity and inclusion in the practice of architecture, as well as respect for the environment are values that integrate the training of its students and are embedded in the program's courses and especially in its design workshops.

The preparation of architectural projects considers diverse environments taking as a starting point the particular needs of the different users in the search for the improvement of their living conditions; architecture at the service of the development of social and economic activities, according to the place, incorporating the regulations corresponding to the accessibility standards for people with disabilities, and generating spaces that guarantee equity and inclusion. This can be seen, for example, in the courses Architectural Research (AR246)⁶⁷ and Professional Project Guidelines (AR271)⁶⁸.

There is also a new course to be incorporated to the program curriculum, **Project Management** (AR350), where the student identifies and analyzes the different perspectives required to manage and develop an architectural project. Understands the role of architects in the set of the stakeholders participating in the design and execution of the project, developing skills for proper management of professional activity with a collaborative, inclusive, creative and empathic attitude with other disciplines, the communities they serve and the clients they work for.

This value has been evaluated by the School in the Architectural Research (AR246) course through the application of the rubric in its Social Equity dimension PC8, see rubric in Appendix 2.11⁶⁹. The current status is 75% achieved and the goal is to maintain this figure for the following academic period.

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

Program Response: With the objective of training innovative leaders with a global vision, the program articulates knowledge and innovation from its origin. Since 1994, the design workshops have incorporated professors from different specialties and with outstanding careers to offer at

⁶⁷ Appendix 2.8: Syllabus Architectural Research (AR246)

⁶⁸ Appendix 2.9: Syllabus Guidelines for Professional Projects (AR271)

⁶⁹ Appendix 2.11: Rubric Architectural Research (AR246)

different levels of the program the professional trends of the national and international reality, motivating students to overcome their limits.

At the end of each term, the program's design workshops are evaluated by means of a Workshop Tour, in which the projects developed during the term are presented for discussion before the dean, the program director and the course professors, as a jury that evaluates their results in search of continuous improvement of the teaching-learning process.

Likewise, since 1996, the course has had construction workshops. These are a sequence of workshops that start in the fourth term of the program to complement theory with building practice, exploring on site the aspects of preliminary works, masonry, roofing and light coverings, and timber construction and finishes, each one of these topics corresponds to a specific workshop. They also incorporate the use of specialized machines and tools to face construction challenges in real time, facilitating knowledge and innovation in a practical way. These workshops offer the student the approach and update with construction techniques at 1:1 scale, bringing the student closer to a sensory experience of hands-on activities.

The results are verified in the Construction Workshop Tour at the end of each cycle, where students present the results of their abilities to the community of School authorities, faculty, and parents.

On the other hand, the Understanding CAD (AR342) subject, is always updated with the use of the latest technological innovations in the area of software use for design. It works compulsorily from the fourth level of the program on the representation in 2D, 3D with BIM methodology, modeling of complex shapes, and digital fabrication. See syllabus in Appendix 2.12.⁷⁰

The program also offers its students three mentions that will allow them to continue innovating in their profession:

- "Digital Technologies," this mention promotes technological and digital innovation associated with manufacturing in order to complement the specific competencies of an architect for their insertion in the labor market. See Appendix 2.13⁷¹.
- "Graphic Expression," this mention consists of a set of five courses in which different explorations on the use of color, materiality, typography, form and composition are carried out aiming to provide students with complementary skills that are incorporated into their training. See Appendix 2.14⁷².
- "Art and Architecture History and Critique," this mention seeks to promote research, through history, theories and contemporary trends, in order to develop the identity and critical sense in relation to art, architecture and the city. See Appendix 2.15⁷³

Research is the pillar of each course and workshop. More precisely, the program links formative research from a constant revision of its curricular plan. The creation of knowledge in the School takes place both from the initiatives and research proposals of faculty members and from research proposals of students to obtain their Bachelor's degree, which is later linked to the Thesis Project.

The School has research courses in its curriculum to support the student with formal methodologies and instruments of formative research: Research Methodology (AR347 - Level 6), Architectural Research (AR246 - Level 8), Professional Project Guidelines (AR271 - Level 9), Workshop IX Professional Practice Workshop (AR302 - Level 9) and Workshop X Thesis Workshop (AR304 - Level 10). Through these 5 courses, students are engaged in the practice

⁷⁰ Appendix 2.12: Syllabus Understanding CAD (AR342)

⁷¹ Appendix 2.13: Mention in Digital Technologies

⁷² Appendix 2.14: Mention in Graphic Expression

⁷³ Appendix 2.15: Mention in Art and Architecture History and Critique

of the profession through formative research and the understanding of the practical reality with nuances that promote possibilities for innovation.

Formative research in technologies starts from the fourth level of the program. The standards of the specialized laboratories of the School of Architecture incorporate software: Autodesk Revit, Rhinoceros, NavisWorks, Adobe Suite, Autodesk 3DS Max, V-Ray for Rhino, V-Ray for 3DS Max, ArchiCAD and Grasshopper3D, along with Makerbot 3D Printers and large format printers to link students with representational technologies.

In addition to formative research, the School of Architecture in a joint effort with the UPC Research Department, promotes scientific research, thus research conducted in the profession adds to the curricular efforts of the program. In Appendix 2.16⁷⁴ the list of publications of the last 5 years is presented. The publications made in the research lines defined by the school are: "Digital Fabrication and computational modeling in architecture" and "Urbanism in history and actuality", available at the following link.

It is important to note that in 2020 the School of Architecture has developed research with 16 institutions and universities in the U.S. and Latin America, promoting networking for faculty and students. This list includes Amazon Web Services, Carnegie Mellon University, Georgia Tech Research Institute, Northeastern University, Penn State University, Rigetti Computing, Universidad Adolfo Ibáñez, Universidad de Buenos Aires, Universidad de Chile, Universidad de Sao Paulo, Universidad del Bío-Bío, Universidade Estadual de Campinas, Universidade Federal de Juiz de For a, Universidade Federal de Rio de Janeiro, Universidade Presbiteriana Mackenzie, and Universidad Técnica Federico Santa María.

The evaluation of this shared value is considered as part of the School' strategic plan, having defined as a goal for 2021 the publication of 10 indexed articles, a goal that was surpassed by having 11 articles published at the end of the year. See Appendix 2.17⁷⁵; the goal for 2022.

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

Program Response: Leadership, collaboration and commitment to the community are values that are passed on to the students of the program throughout their professional training, as they are trained to work creatively, collaboratively and empathetically with specialists from other disciplines, with their potential clients, and with each other.

The program's design workshops and construction workshops are organized with teamwork with dynamics focused on this objective in mind. All the design workshops have a first stage of collaborative research and information gathering, and the construction workshops use the dynamics of role-playing in the process of building a project.

The interaction with the specialists involved in the elaboration of projects begins in the first subjects of Structural Modeling and Installations in Buildings and are affirmed with the necessary advisory work for their research projects and degree projects in subjects such as Architectural Research (AR246), Professional Project Guidelines (AR271) and Workshop X - Thesis Workshop (AR304).

In terms of commitment to the community, one of UPC's institutional learning outcomes is Citizenship, defined as the ability to value human coexistence in plural societies, reflecting on

⁷⁴ Appendix 2.16: List of publications School of Architecture

⁷⁵ Appendix 2.17: Architecture 2022-2024 Strategic Plan Indicator Dashboard

the moral aspects of their own actions and decisions, and taking responsibility for the consequences thereof, within a framework of respect for the rights and duties of citizens.

Being an institutional competence, this is articulated in all UPC programs as part of the graduate student profile. In this sense, students of the School of Architecture are also trained as citizens, being able to generate socially responsible projects, apply critical thinking and put their design skills at the service of the community. This can be evidenced in the topics of many of the architectural design workshops, as shown in Table 2.2:

Code	Courses	Project	Faculty in charge
AR313	Workshop VI	Artist Community	Mercedes Alvariño
	Architecture and Construction	Center / Barranco	Elizabeth Cárdenas
AR260	Workshop IV	Fishermen's shelter	Gonzalo García
	Architecture and Functionality	National Reserve	María Alejandra
		Noryauyos Cocha.	Briceño
AR308	Workshop IV	Multi-family Housing	Enrique Gómez de la
	Architecture and Functionality	in Rimac Foot of the	Torre, Hugo Iberico
		San Cristóbal Hill	
AR324	Workshop VII	Sports Rehabilitation	Gladys Hishikawa-
	Architecture and Integration	Center Villa El	Alejandra Jordán
		Salvador	
AR313	Workshop VI	Urban Regeneration-	Dieter Brunner-
	Architecture and Construction	Pescadores Beach,	Gonzalo Zegarra
		Chorrillos	-
AR301	Workshop VIII	Regeneration-	Mario Braganini-
	Architecture and City Urban	Pescadores Beach,	Dieter Brunner
	-	Chorrillos	
AR309	Workshop V	Ecological Park-	André Nery-Javier
	Architecture and Environment	Ancón	Solorzano

Table 2.2 Architectural Design Workshops

The focus on social commitment is also evident in the students' research for the bachelor's degree, in which the presence of this approach and commitment is a majority. As an example, Appendix 2.18⁷⁶ and Appendix 2.19⁷⁷ are shown.

The School also encourages its students to participate in competitions and social outreach activities such as "Make a Wish International" <u>https://www.makeawishperu.org/</u>, "Here For Good" Award organized by the Laureate Network, and the "Protagonists of Change" (Protagonistas del Cambio) Program.

The training received in these values is also reflected in the achievements of our students and graduates, some of them are the following:

The Puno project (Proyecto Puno), in 2014, Ana Loayza, Andrea Segura, and Mauricio Gilbonio, graduates of the UPC Architecture program, received the highest recognition in the world edition of the 2014 "Here For Good" Award from Laureate Education Inc. Their initiative "The Puno Project," dedicated to developing environmentally sustainable housing to counter

⁷⁶ Appendix 2.18: Community Development Center in Comas (Abstract). In the following <u>Link</u>, you can find the complete document.

⁷⁷ Appendix 2.19: Community Development Center in Barranca (Abstract). In the following <u>Link</u> you can find the complete document



extreme cold in the highest areas of the department of Puno, was chosen among several nominated projects from around the world, and was awarded USD 10,000 to continue with its implementation. The following <u>link</u> presents the developed project.

- **Sustainable shelters** (Refugios Sostenibles), is the name of the contest that was organized in 2018 with the participation of students of architectural design courses from the third to the tenth term. This contest was carried out with the purpose of promoting in the students the interest in providing technical solutions for emergency housing in the face of natural disasters that constantly face the different regions of our country, and that take into account in turn, the self-sustainability of these shelters facing recurring phenomena in these regions. Information on the competition is presented in Appendix 2.20⁷⁸, Sustainable Shelters for Emergency Zones Contest.
- **MUTUO Project**, in 2018 Marisol Layseca, a graduate of UPC's Architecture program, won the Protagonist of Change award with this project. This is a collaborative project whose mission is to improve the quality of life of low-income families, who build their own homes in precarious conditions to improve housing conditions through prevention, planning and the application of formal practices and appropriate technical criteria. See <u>link</u> (English subtitles).

Additionally, as a sign of the continuity of this commitment of the faculty in the formation of its students with the values of Leadership, Collaboration and Community Engagement, we can mention the participation of 441 of our students in volunteer programs: 210 in 2019, 51 in 2020 and 180 in 2021. In programs such as:

- **Un techo para mi país** (A Roof for My Country), an organization made up of young volunteers who work together with inhabitants of settlements, develop projects that improve the habitat and habitability conditions of families, in pursuit of a better quality of life and capacity building. This can take place through the construction of emergency housing or by implementing community development programs.
- **Casa Ronald** (Ronald McDonald House), whose mission is to develop and support programs that directly improve the health of children and their families. A Ronald House is a "home away from home" for low-income families who must travel to Lima from other parts of the country for their child with a complex illness to receive the medical treatment they requires.

Appendix 2.21⁷⁹ presents the participation of architecture students in volunteer programs.

Also in the **Urban Management** (AR303) course, students perform a cross-sectional analysis of the city management, from which knowledge is built collaboratively. This knowledge is applied to a real case with the participation of the local citizens, working with a collaborative, inclusive, creative and empathetic attitude, and a leadership initiative; assuming responsibility for the positive transformation of the urban environment in the areas where the proposal is applied. See syllabus in Appendix 2.24⁸⁰

Finally, this shared value is part of the strategic plan of the School of Architecture (Appendix 2.17⁸¹) by establishing the expected level of achievement regarding institutional learning outcomes, and in this case, we refer specifically to the Citizenship learning outcome, defined as: "The ability to evaluate the ethical sense of actions and decisions in relation to human coexistence in plural societies and the respect for citizens' rights and duties."

⁷⁸ Appendix 2.20: Sustainable Shelters Contest

⁷⁹ Appendix 2.21: Participation in volunteer programs

⁸⁰ Appendix 2.24: Syllabus Urban management (AR303)

⁸¹ Appendix 2.17: Architecture 2022-2024 Strategic Plan Indicator Dashboard

NAMB

The goal established for this learning outcome (level 3) is to obtain a percentage of 75% of students reaching the achieved level. This institutional outcome is currently in its assessment process.

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

Program Response: Unlike the American professional degree system, in Peru, universities have among their functions obtaining the professional title of their graduates, this requirement involves that the School maintains a relationship for an additional time after the conclusion of the tenth term of studies of their students.

In the Architecture program, students have a period of one year from the end of their studies to develop the professional project to be presented for its defense and to obtain the professional title of architect, during this period they are given advice for the development of their project.

In the case of those graduates who have not presented their project at the end of the one-year period, the School organizes a course called "Thesis Advising Workshop" to accompany them until they obtain their professional degree.

Committed to the value of lifelong learning, the School invites its graduates to participate in its various study trip programs that are organized every year to different destinations in Europe, USA, Asia and also in Peru, as well as conferences organized in collaboration with other institutions. The organization of these conferences has increased due to the intensive use of digital media, facilitating participation not only as attendees but also as speakers. Appendix 2.22⁸² presents the list of conferences held in the period 2020-2021. Some of them are:

International Seminar "Nuevas formas de ver la arquitectura" (New Ways of Looking at Architecture) (May 2020)

- "Substancia sobre el espectáculo" (Substance over spectacle) Héctor Abarca (Canada)
- "Bordeaux, Ser arquitecto en un Equipo de Construccion" (Bordeaux, Being an Architect in a Construction Team) Gabriele Onori (France)
- "Social Housing y accesibilidad" (Social Housing and Accessibility) Francesco Cocco (Italy)
- "De la Calle al Ático" (From the Street to the Attic) Pedro Pignatelli (Austria)

II Seminario Internacional "Experiencias Latinoamericanas" (2nd International Seminar "Latin American Experiences") (Jun 2020)

- "Acciones desde Territorios Satélites" (Actions from Satellite Territories) Jose Fernando Gómez (Ecuador)
- "Repensar la Ciudad. Entre la Arq. Popular y las Nuevas Propuestas" (Rethinking the City. Between Popular Arch. and New Proposals) Juliana Arboleda (Colombia)}
- "Del Objeto al Sujeto, Participación Comunitaria en el Diseño de Colegios Públicos" (From the Object to the Subject, Community Participation in the Design of Public Schools) Jorge Marsino (Chile)

Series of International Conferences "Hablemos de Arquitectura 2020" (Let's Talk About Architecture 2020)

⁸²Appendix 2.22: List of conferences 2020-2021

- "Viviendas Sostenibles: Arquitectura Bioclimática" (Sustainable Housing: Bioclimatic Architecture) John Hertz (USA)
- "Los Balcones Salvadores" (The Savior Balconies) Olivier Lehmans (France)
- "La Balsa de Piedra. Arte, Arquitectura y Paisaje" (The Stone Raft. Art, Architecture and Landscape) Virtual Trip to Lanzarote Rosario Velasco (Spain)
- "Espacio Sacro: Símbolo y Trascendencia en la Arquitectura" (Sacred Space: Symbol and Transcendence in Architecture) Andre Nery (Brazil)
- "Normas y Trazas Urbanas en el Desierto" (Urban Norms and Traces in the Desert) Adine Gavazzi (Italy) (in synergy with the School of Law of the UPC).
- "Discussion Forum: Experiencias en los Talleres de Diseño" (Experiences in Design Workshops) Gabriel Grande (Spain) and Jaime Lecca (Peru). Discussion Panel with students

The School of Architecture has just inaugurated this semester the Master's Degree in Architecture, which seeks to consolidate the continuing education of its students and provide them with practical tools for their profession. The new Master's program provides specialized training in the fundamentals of abstraction, conceptualization, the basis of architectural and urban history and theory, and the use of advanced design tools with the aim of developing sustainable solutions that transform the built environment. Graduates will be able to work as project managers, planning managers or leading architects in national or transnational construction companies, in public/private urban development organizations, and in other enterprises, among others.

As part of other activities to promote continuous learning, the School has the good practice of inviting graduates of the program to return to the Workshop X - Thesis Workshop (AR304) as guests to share their experiences with students who are about to graduate, resulting in a virtuous circle of mutual learning.

Finally, the university facilitates a local and international Continuing Education Program, with agreements and benefits for graduates, both for postgraduate programs and short-term international programs with institutions such as Universidad Europea de Madrid - Spain, EAE Business School - Spain, Florida International University - USA, Lacocca Institute of Lehigh University - USA, New School of Architecture and Design - USA, Nuova Accademia Di Belle Arti - Italy, Domus Academy - Italy.

Following what has been shown in this section, the School evaluates this value in statistical terms in terms of the number of activities carried out, with the goals as are presented in the program strategic plan, see appendix 2.17⁸³.

⁸³ Appendix 2.17: Architecture 2022-2024 Strategic Plan Indicator Dashboard

3—Program and Student Criteria

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

The School of Architecture, after a thorough process of comparative analysis of its Bachelor Architecture program and the Program Criteria (PC) and Student Criteria (SC), as defined by NAAB in the 2020 Conditions, has made the decision to incorporate the latter into the various dimensions of its Program Learning Outcomes (PLO) to be developed and assessed throughout the Architecture program. The program PLOs are: Grounded Design, Technique and Construction, Architectural Culture and Professional Management.

Appendix 3.1⁸⁴ provides a table that shows the correlation between PC and SC (2020 conditions) - the Program Learning Outcomes (PLO) of UPC's Architecture program and the courses/activities in which they are evaluated. Likewise, see Appendix 3.2 for the PC/SC Matrix⁸⁵.

Consequently, the PC and SC have been incorporated into the continuous evaluation process of the program in the courses/activities defined to that end. Course evaluations are carried out under the One-on-One assessment system.

The One-on-One assessment is an improvement project in which the faculty members of the course evaluate and rate the evidence of each student by using an activity rubric based on the learning outcome rubric. More detailed information on this process can be found in appendix 3.3⁸⁶. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in appendix 3.4⁸⁷.

3.1 Program Criteria (PC)

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

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

Program Response: In August 2021, Arch. John Hertz was appointed Architect Licensing Advisor (ALA) of the School. His CV is attached in Appendix 3.5⁸⁸. He was also registered as ALA in the NCARB, as shown in Appendix 3.6⁸⁹.

Therefore, as of 2021-2, in a joint effort with UPC's ALA, a series of mandatory advisory sessions was conducted among the students of the Workshop X - Thesis Workshop (AR304) in which the topic of Licensing Requirements in the United States was discussed, as shown in Table 3.1 below:

⁸⁴ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

⁸⁵ Appendix 3.2: NAAB PC/SC Matrix

⁸⁶ Appendix 3.3: Assessment One-on-One Faculty Guide

⁸⁷ Appendix 3.4: PC&SC 2021 Assessment Results Report

⁸⁸ Appendix 3.5: Curriculum Vitae - John Hertz (ALA)

⁸⁹ Appendix 3.6: NCARB registration email of UPC-ALA



Table 3.1: U.S.	Licensing Advisor	y Sessions
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1.5		
	Week	Discussion with group 1 of Workshop X - Thesis Workshop.
	commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
	10/25/2021	Education.
	Week	Discussion with group 2 of Workshop X - Thesis Workshop.
	commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
	11/01/2021	Education.
	Week	Discussion with group 3 of Workshop X - Thesis Workshop.
	commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
	11/08/2021	Education.

In addition to the face-to-face advisory sessions, in order to ensure all students were provided with this key information it was granted access to the session recording to all students of the Workshop X - Thesis Workshop (AR304). Students may also seek support to the course coordinator so as to solve any questions or doubts that may arise.

Regarding the array of professional opportunities in architecture, faculty members ensure that the students are aware of them by including different strategies and requirements that are part of the training of all students.

At the start of the program, the Introduction to Architecture (AR01) course provides students with an overview of the professional opportunities in the field of architecture, as shown in the syllabus attached in Appendix 3.7^{90} .

In the more advanced stages of the program, students are qualified to carry out preprofessional internships, provided they have earned 100 credits. Said internships are mandatory as they are a requirement to obtain the Bachelor's degree. Pre-professional internships are regulated by UPC's Pre-professional and Professional Internship Regulations (<u>Link</u>) and managed through its Employment Opportunities department.

Pre-professional internships allow students to apply the knowledge, skills and abilities acquired throughout their professional training in a real work environment in organizations, whether public or private, local or international, and provided their work is directly related to their profession. A direct supervisor must be assigned to provide guidance to the students throughout their internship and evaluate their performance. This way, students come into direct contact with their profession, from the search and choice of the institution, how the profession is developed, and how they relate to it; therefore complementing their training throughout the duration of the internship.

Upon completion of the internships, the students and their direct supervisors within the institution must submit a report, both of which must be reviewed and approved by the Director of the Architecture program. Appendix 3.8⁹¹ provides the list of pre-professional internships carried out by the students of the program in various institutions in 2020 and 2021.

In order to provide its students with an array of opportunities in the field of architecture, the School has included in the Workshop IX - Professional Practice Workshop (AR302), as of 2021-2, training in the use of codes and regulations in the United States. Students must therefore

⁹⁰ Appendix 3.7: Introduction to Architecture (AR01) Syllabus

⁹¹ Appendix 3.8: List of Pre-Professional Internships (2020-2021)



carry out a project located in the United States. The syllabus is attached in Appendix 3.9⁹² and the project rubric in Appendix 3.10⁹³.

In line with this initiative, the School saw fit to conduct a training workshop focusing on the regulations in the field of architecture in the United States for all faculty members of the Workshop X - Professional Practice Workshop (AR302). Arch. John Hertz (ALA) is responsible for organizing the workshop, which will provide faculty members with knowledge on the subject and additionally prepare students for the training they will receive in the Workshop X - Thesis Workshop (AR304) on U.S. licensing.

Likewise, the program offers its students three mentions that will allow them to develop different lines in their profession:

- "Digital Technologies," which fosters technological and digital innovation associated with manufacturing in order to complement the specific abilities of architects for their insertion in the labor market. See Appendix 3.11⁹⁴.
- "Graphical Expression," which comprises five courses that explore the use of color, materials, typography, form and composition in order to provide students with additional competencies to be integrated to their training. See Appendix 3.12⁹⁵.
- "Art and Architecture History and Critique," which seeks to promote research through history, theories and contemporary trends in order to develop both identity and critical sense towards arts, architecture and the city. See Appendix 3.13⁹⁶.

In line with the above, the program evaluates compliance with PC1 Career Paths as follows:

- By ensuring 100% student attendance in the U.S. Licensing advisory sessions in the Workshop X Thesis Workshop (AR304).
- By evaluating pre-professional internship reports by the Director of the Architecture program.

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

Program Response: PC.2 Design has been incorporated into the Program Learning Outcome of Grounded design, which allows students to design architectural proposals and use previous research and incorporate all the variables involved in an architectural project. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix⁹⁷ and Appendix 3.2 NAAB PC/SC Matrix⁹⁸).

The design process, which plays a key role in the formation of the built environment and the methods through which the design process integrates various factors are taught to students throughout the program, within the framework of the program's ten architectural design workshops organized throughout the curriculum and articulated with the Program Learning Outcome of Grounded design.

⁹² Appendix 3.9: Syllabus Workshop IX - Professional Practice Workshop (AR302)

⁹³ Appendix 3.10: Rubric Workshop IX - Professional Practice Workshop (AR302)

⁹⁴ Appendix 3.11: Mention in Digital Technologies

⁹⁵ Appendix 3.12: Mention in Graphical Expression

⁹⁶ Appendix 3.13: Mention in Art and Architecture History and Critique

⁹⁷ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

⁹⁸ Appendix 3.2: NAAB PC/SC Matrix



The program's architectural design workshops are organized as follows:

- A first introductory phase (Workshops I and II) that aims to spark imagination and creativity among students through conceptual exercises related to composition and spatial exploration.
- The workshops that follow (Workshops III to VII) form a sequence, ranging from lesser to greater complexity that gradually incorporates the characteristics of function, location, context, environment, construction and safety, and integrate all the characteristics of the field of architecture in Workshop VII Integration Workshop (AR310).
- The last three workshops put greater emphasis on the incorporation of the concepts of urban planning (Workshop VIII - Architecture and Cities AR301) and professional practice (Workshop IX - Professional Practice Workshop AR302) and conclude with individual project proposals (Workshop X - Thesis Workshop AR304), which are a starting point for the students' thesis projects so as to obtain the professional degree.

Appendix 3.14⁹⁹ provides details of the structure, description and objectives of each design workshop of the program. The syllabi of the ten design workshops are attached in Appendix 3.15¹⁰⁰.

In terms of evaluations, a rubric was designed to include PC2 in the Program Learning Outcome of Grounded design to be applied to the validation courses. In other words, the courses allow students to submit assignments involving a design according to a clearly structured process, the space and/or scales of development required, and innovative proposals.

The validation courses identified are as follows:

- Workshop X Thesis Workshop (AR304). See rubric attached in Appendix 3.16¹⁰¹.
- Workshop IX Professional Practice Workshop (AR302). See rubric attached in Appendix 3.10¹⁰².
- Workshop VIII Architecture and Cities (AR301). See rubric ttached in Appendix 3.17¹⁰³.

The evaluation results, benchmarks and conclusions regarding improvements are presented in table 3.2 below.

⁹⁹ Appendix 3.14: Structure, description and objectives of the Design Workshops

¹⁰⁰ Appendix 3.15: Syllabi of the Design Workshops

¹⁰¹ Appendix 3.16: Rubric Workshop X - Thesis Workshop (AR304)

¹⁰² Appendix 3.10: Rubric Workshop IX - Professional Practice Workshop (AR302)

¹⁰³ Appendix 3.17: Rubric Workshop VIII - Architecture and Cities (AR301)



Table 3.2 PC2 Assessment

Related Program Learning Outcome: Grounded design

Validation Courses			PC2. Design	
	Course	2021-1 Results	2021-2 Results	Official Benchmark
AR304	Workshop X - Thesis Workshop	Passed: 61.1% Outstanding: 10.5%	Passed: 56.9% Outstanding: 8.8%	Increase Passed at 70%
AR302	Workshop IX - Professional Practice Workshop	Passed: 38.4% Outstanding: 3.7%	Passed: 29.3% Outstanding: 1.8%	Increase Passed at 50%
AR301	Workshop VIII - Architecture and Cities	Passed: 29% Outstanding: 10.5%	Passed: 47.1% Outstanding: 5.8%	Increase Passed at 50%
CONTIN	IUOUS IMPROVEMENT	1		
Conclus Improve	sions and ement Opportunities	unities The evaluation of the final assignment of Workshop X - Thesis Workshop, Workshop IX - Professional Practice Workshop, and Workshop VIII - Architecture and Cities is maintained.		
Key:				
Validati	on Courses			

Process Courses

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4^{104} .

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

Program Response: PC3 Ecological Knowledge and Responsibility has been incorporated into the Program Learning Outcome of Grounded design, which allows students to design architectural proposals and use previous research and incorporate all the variables involved in an architectural project. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁰⁵ and Appendix 3.2 NAAB PC/SC Matrix¹⁰⁶).

To ensure that students fully understand the relevance of **PC3** in the validation courses, they must defend a project from a holistic perspective and explain how the built environment modifies and impacts the natural environment. Therefore, the application of ecological and sustainability principles will allow for efficient mitigation of said impacts.

The validation courses identified for PC3 are as follows: Professional Project Guidelines (AR271) (see Appendix 3.18¹⁰⁷), Sustainability and Environment (AR338) and Workshop V - Architecture and Environment (AR309). In this regard, it is important to mention that these last two courses represent an improvement with respect to PC3 within the program:

¹⁰⁴ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR304** – pp.57-68; pp.123-143; **AR302** – pp. 31-16, pp. 100-105; **AR301** – pp. 11-16, pp. 82-87)

¹⁰⁵ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁰⁶ Appendix 3.2: NAAB PC/SC Matrix

¹⁰⁷ Appendix 3.18: Syllabus Professional Project Guidelines (AR271)



- The Sustainability and Environment (AR338) course has been recently incorporated into the program's curriculum as part of improvement actions. This course allows students to become aware of the role of citizens in the development of a sustainable professional practice, thus fostering a critical vision of the causes and effects of climate change and the importance of the application of energy efficiency and resource management systems in all areas, in order to reduce the negative impacts on the environment and ensure decent living conditions for future generations on earth. See syllabus attached in Appendix 3.19¹⁰⁸
- The **Workshop V Architecture and Environment** (AR309) has been strengthened through projects showcasing how the built environment modifies and impacts the natural environment. Students must therefore apply ecological and sustainability principles in order to efficiently mitigate said impacts. See syllabus attached in Appendix 3.20¹⁰⁹.

With regard to evaluations, a rubric was designed to include PC3 within the Program Learning Outcome of Grounded design, which applies to the following validation courses:

- Professional Project Guidelines (AR271), see rubric attached in Appendix 3.21¹¹⁰
- Sustainability and Environment (AR338), see rubric attached in Appendix 3.22¹¹¹, and
- Workshop V Architecture and Environment (AR309), see rubric attached in Appendix 3.23¹¹²

The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Va	lidation Courses	PC3. Ecological Literacy and Responsibility		
Course		2021-1 Results	2021-2 Results	Official Benchmark
AR271	Professional Project Guidelines	Passed: 66.3% Outstanding: 9.2%	Passed: 64.2% Outstanding: 10.1%	Maintain % of Passed over 60%
AR309	Workshop V - Architecture and Environment	Assessment One-on-One (2022-1 Plan)		
AR338	Sustainability and Environment	Assessment One-on-One (2022-1 Plan)		
CONTIN	IUOUS IMPROVEMENT			
Conclus Improve	sions and ement Opportunities	The evaluation will be incorporated into the EAC software of the Workshop V - Architecture and Environment (AR309) and Sustainability and Environment (AR338) in order to monitor progress.		
Key:	Key:			
Validati	on Courses			

Table 3.3 PC3 Assessment

Related Program Learning Outcome: Grounded design

Process Courses

¹⁰⁸ Appendix 3.19: Syllabus Sustainability and Environment (AR338)

¹⁰⁹ Appendix 3.20: Syllabus Workshop V - Architecture and Environment (AR309)

¹¹⁰ Appendix 3.21: Rubric Professional Project Guidelines (AR271)

¹¹¹ Appendix 3.22: Rubric Sustainability and Environment (AR338)

¹¹² Appendix 3.23: Rubric Workshop V - Architecture and Environment (AR309)

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4^{113} .

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

Program Response: PC.4 History and Theory has been incorporated into the Program Learning Outcome of Architectural Culture, which gradually links architectural approaches to different historical periods and theoretical proposals on which they are based. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹¹⁴ and Appendix 3.2 NAAB PC/SC Matrix¹¹⁵).

To ensure that students fully understand the relevance of PC4 in the validation courses, which include Theory of Architecture (AR112), Art and Modern and Contemporary Architecture (AR345) and Peruvian Architecture (AR110), students must:

- Understand the *history* of architecture and urban planning within different contexts. Link formal, functional and technical qualities of architectural and artistic objects and explain them based on their historical specificities and theoretical, economic, social and political contexts, and explore technological developments and pay special attention to coherent sets to which they belong.
- Understand the theoretical concepts related to architecture and urban planning within different contexts: Link the different theoretical approaches in architecture and urban planning and explain them based on their historical specificities and theoretical, economic, social and political contexts, and explore technological developments and pay special attention to coherent sets to which they belong.

To this end, a rubric was designed to incorporate PC4 into the Program Learning Outcome of Architectural Culture for each one of the following courses:

- Rubric Theory of Architecture (AR112) (see Appendix 3.24¹¹⁶)
- Rubric Modern and Contemporary Art and Architecture (AR345) (see Appendix 3.25¹¹⁷)
- Rubric Peruvian Architecture (AR110) (see Appendix 3.26¹¹⁸)

The evaluation was carried out in the Theory of Architecture (AR112) course as means for final validation; however, in order to validate the progress made by students, as of 2022-1, the courses of Art and Modern and Contemporary Architecture (AR345) and Peruvian Architecture (AR110) will also be evaluated within this framework as part of improvement actions.

The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

¹¹³ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR271** – pp. 37-36, pp. 106-112)

¹¹⁴ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹¹⁵ Appendix 3.2: NAAB PC/SC Matrix

¹¹⁶ Appendix 3.24: Rubric Theory of Architecture (AR112)

¹¹⁷ Appendix 3.25: Rubric Modern and Contemporary Art and Architecture (AR345)

¹¹⁸ Appendix 3.26: Rubric Peruvian Architecture (AR110)



Table 3.4 PC4 Assessment

Related Program Learning Outcome: Architectural Culture

Va	lidation Courses	PC 4. History and Theory		
Course		2021-1 Results	2021-2 Results	2022 Benchmark
AR112	Theory of Architecture	(History) Passed: 85% Outstanding: 13.1% (Theory) Passed: 59.7% Outstanding: 37.9%	(History) Passed: 38.4% Outstanding: 27.3% (Theory) Passed 64.4% and Outstanding 27.7%	Maintain: (History) Passed: 38.4% Outstanding: 27.3% (Theory) Passed 64.4% and Outstanding 27.7%
AR345	Modern and Contemporary Art and Architecture	Assessment One-on-One (2022-1 Plan)		
AR110	Peruvian Architecture	Assessment One-on-One (2022-1 Plan)		
CONTIN	UOUS IMPROVEMENT			
Conclus Improve	ions and ment Opportunities	The evaluation will be incorporated into the EAC software of the Modern and Contemporary Art and Architecture and Peruvian Architecture courses in order to monitor progress. In addition, the results of these changes will be evaluated within the framework of the evaluation of the final academic assignment.		
Key:	Key:			
Validatio	on Courses			

Process Courses

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹¹⁹.

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

Program Response: PC.5 Research and Innovation has been incorporated into the Program Learning Outcome of Grounded design, which allows students to design architectural proposals and use previous research and incorporate all the variables involved in an architectural project. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹²⁰ and Appendix 3.2 NAAB PC/SC Matrix¹²¹).

To ensure that students fully understand the relevance of **PC5** in relation to the program, the following improvement actions have been implemented:

 A new course has been incorporated into the curriculum in the sixth term of the program: Research Methodology (AR347) (see syllabus attached in Appendix 3.27¹²²). This course provides students with methodological foundations and tools related to scientific research, bringing them closer to the research process, so as to develop skills and abilities in the

¹¹⁹ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR112** – pp. 69-74, pp. 144-149)

¹²⁰ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹²¹ Appendix 3.2: NAAB PC/SC Matrix

¹²² Appendix 3.27: Syllabus Research Methodology (AR347)



handling of conceptual tools and research techniques that facilitate the search for and organization of knowledge.

- The identification of research lines for thesis works (see Appendix 3.28¹²³) allows students to take part in efforts to increase the number of research works within the School. In this sense, the School has made the decision to focus on three thesis topics: Housing, Education and Health. The latter constitute research lines for the School that will allow:
 - a. To focus on research lines and avoid dispersion; therefore, promoting more in-depth analysis.
 - b. To increase data collection based on which other classes can delve into and advance research.
 - c. To achieve more efficient research, including in related fields: "Research in Architecture" and "Professional Project Guidelines".
 - d. To build fields of specialization among faculty members.
 - e. To delve into these areas, which are highly relevant for the development of Peru, and the social responsibility of UPC's School of Architecture within society.
- The latter is directly related to the program's curricular structure. Said structure comprises a sequence the following courses: Research Methodology (AR347) taught in the sixth term, Research in Architecture (AR349) of the eighth term, focusing on a research work or thesis to obtain the Bachelor's degree; and the Professional Project Guidelines (AR271) course of the ninth term, and Workshop X Thesis Workshop (AR304) of the tenth term, geared towards the development of the Professional Thesis Project.

The validation courses of PC.5 are as follows: Professional Project Guidelines (AR271) and Research in Architecture (AR349), which allow students to fully understand its relevance and encourage students to conduct research that leads to innovative and sustainable solutions in the field of architecture. To this end, students must submit a design proposal linked to a preliminary research that provides theoretical foundations to the contributions raised by their proposal.

The latter will be evidenced through the elaboration of a written and graphical document with a firmly grounded proposal. This includes the qualitative and quantitative analysis of the units of functional spaces so as to allow for innovative proposals in the technological and environmental fields.

To this end, a rubric was designed to incorporate PC5 in the Program Learning Outcome of Grounded design of each course:

- Rubric Research in Architecture (AR349) (See appendix 3.29)¹²⁴
- Rubric Professional Project Guidelines (AR271) (See Appendix 3.21)¹²⁵

The evaluation was carried out within the framework of the Professional Project Guidelines (AR271) and Research in Architecture (AR349) courses. The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

¹²³ Appendix 3.28: Meeting Minutes and Communiqué on Thesis Lines

¹²⁴ Appendix 3.29: Rubric Research in Architecture (AR349)

¹²⁵ Appendix 3.21: Rubric Professional Project Guidelines (AR271)



Table 3.5 PC5 Assessment

Related Program Learning Outcome: Grounded design

Validation Courses		PC5. Research and Innovation		
Course		2021-1 Results	2021-2 Results	Official Benchmark
AR271	Professional Project Guidelines	Passed: 58.3% Outstanding: 8.6%	Passed: 63.3% Outstanding: 11%	Maintain % of Passed over 60%
AR246	Architectural Research	Passed: 75.7% Outstanding: 9%	Passed: 83% Outstanding: 9.4%	Maintain % of Passed over 80%
CONTINUOUS IMPROVEMENT				
Conclus Improve	sions and ement Opportunities	The program maintained the evaluation for these courses and the impact of the improvement actions implemented must be monitored.		
Kev:				

Key:

Validation Courses Process Courses

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders¹²⁶.

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

Program Response: PC.6 Leadership and Collaboration has been incorporated into the Program Learning Outcome of Professional Management, which identifies the different professionals involved in the execution of a project and work, taking into account the different regulations and professional codes of ethics. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹²⁷ and Appendix 3.2 NAAB PC/SC Matrix¹²⁸).

Overall, as presented in the *Shared Values* section, leadership, collaboration and community engagement are values that are instilled in the students of the program throughout their professional training, as the program fosters work in a creative, collaborative and empathetic manner with experts from other disciplines, their potential clients and among their peers.

The program's design and construction workshops are organized around the strengthening of skills, such as teamwork, through activities to be developed accordingly. All the design workshops first focus on collaborative research and data collection, whereas the construction workshops focus on role-playing within the process of building a project.

Student interaction with experts from other fields who participate in the elaboration of a project starts in the course of Structural Modeling and Installations in Buildings, which is later strengthened within the framework of advisory sessions for their research projects and thesis

¹²⁶ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR271** – pp. 37-46, pp. 106-112; **AR246** – pp. 22-30, pp- 93-99)

¹²⁷ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹²⁸ Appendix 3.2: NAAB PC/SC Matrix

NMB

in courses such as Research in Architecture (AR349), Professional Project Guidelines (AR271) and Workshop X - Thesis Workshop (AR304).

This collaborative, empathetic and creative interaction also provides students with a space to further develop said interaction with members of the community, through information surveys of the places in which they intervene – that is, a research process to be carried out at the beginning of a design process.

Many research and thesis proposals are geared towards proposals focusing on providing social services and community support, as shown in the list of thesis topics proposed by the students of the Workshop X - Thesis Workshop (AR304) in 2019, 2020 and 2021¹²⁹ as well as in the list of theses submitted in 2020 and 2021¹³⁰: The aforementioned list is attached to Appendix 3.30 and 3.31.

In addition, the theses to obtain the Bachelor's degree, which showcase the focus and interest in diverse social and cultural contexts in Peru, is attached in Appendix 3.32¹³¹, 3.33¹³² y 3.34¹³³.

With regard to the leader interaction and group collaboration, the latter is channeled through classroom delegates and the students of each section. The students of each section appoint one of their peers to represent them, as a classroom delegate, and shed critical light on the progress made in different courses and sections.

Even though the class delegates participate in regular meetings with campus faculty members, their responsibilities in terms of representation and specific tasks also include collaborative work with their peers, as they represent them and give them a voice in said meetings. See Appendix 3.35¹³⁴.

In order for students to fully understand the relevance of PC6 throughout the program, students must identify architectural problems that require multidisciplinary work, demonstrating that they are able to identify the specific role of architects in teams with multiple stakeholders involved in the design and execution of architectural works, and the leadership they play in multidisciplinary teams so as to solve said architectural problems.

In this line, the following validation courses have been identified for PC6 in the program:

- Project Management (AR350) (see syllabus attached in Appendix 3.36), ¹³⁵
- Urban Management (AR303) (see syllabus attached in Appendix 3.37¹³⁶), and
- Lightweight Roofing and Formworks (AR346) (see syllabus attached in Appendix 3.38¹³⁷),

In this line of thought, the Project Management (AR350) course is being incorporated into the program as part of improvement actions within the framework of curricular changes. The course will replace the Real Estate Management (AR248) and Professional Synergy (AR295) courses. However, until the new course has been implemented the School believes that the assignments to be developed in the Real Estate Management (AR248) and Professional Synergy (AR295)

¹²⁹ Appendix 3.30: Thesis topics of Workshop X in 2019, 2020 and 2021

¹³⁰ Appendix 3.31: List of theses submitted in 2020 and 2021

¹³¹ Appendix 3.32: Community Center in Comas (Abstract). The complete documentation is available at: Link

¹³² Appendix 3.33: Community Center in Barranca (Abstract). The complete documentation is available at: Link

¹³³ Appendix 3.34: Agritourism lodge in Huaral (Abstract). The complete documentation is available at: Link

¹³⁴ Appendix 3.35: Meeting minutes with 2020 and 2021 Class Delegates

¹³⁵ Appendix 3.36: Syllabus Project Management (AR350)

¹³⁶ Appendix 3.37: Syllabus Urban Management (AR303)

¹³⁷ Appendix 3.38: Syllabus Lightweight Roofing and Formworks (AR346)


courses are aligned with the Program Learning Outcome of Professional Management so as to validate and evaluate PC6.

In line with the above, a rubric that includes PC6 within the Program Learning Outcome of Professional Management was designed for each course:

- Rubric Real Estate Management (AR248) (see Appendix 3.39¹³⁸)
- Rubric Professional Synergy (AR295) (see Appendix 3.40¹³⁹)
- Rubric Lightweight Roofing and Formworks (AR346) (see Appendix 3.41¹⁴⁰)
- Rubric Urban Management (AR303) (see Appendix 3.42¹⁴¹)

The evaluation was carried out within the framework of the Real Estate Management (AR248), Professional Synergy (AR295) and Urban Management (AR303) courses. The Lightweight Roofing and Formworks (AR346) course, as part of the program's improvement actions, will be incorporated into this assessment system as of the 2022-1 term.

The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.6 PC6 Assessment

Validation Courses		PC6. Leadership and Collaboration		
С	ourse	2021-1 Results	2021-2 Results	Official Benchmark
AR295 Prof	fessional Synergy	Passed: 38.9% Outstanding: 46.5&	Passed: 55.9% Outstanding: 41.1%	Maintain % of Passed at 55.9% and Outstanding at 41.1%
AR248 Rea Mar	al Estate nagement	Outstanding: 100%	Passed: 44.6% Outstanding: 42.3%	Maintain % of Passed and Outstanding over 40%
AR303 Urba	an Management	Passed: 45.2% Outstanding: 32.9%	Passed: 50% Outstanding: 7.4%	Increase Passed to 60% and maintain % of Outstanding
AR346 Ligh and	ntweight Roofing Formworks	Assessment One-on-One (2022-1 Plan)		
CONTINUOU	S IMPROVEMENT			
Conclusions and Improvement Opportunities Project Management (AR350) is being incorporated into program through a curricular change as of 2023-1 and will rep Real Estate Management (AR248) and Professional Syr (AR295). Until then, Real Estate Management (AR248) Professional Synergy (AR295) are aligned to the Pro- Learning Outcome of Professional Management so as to val and assess PC6. The Lightweight Roofing and Formworks (AR346) course, as of the program's improvement actions, will be incorporated into assessment system as of the 2022-1 term.			incorporated into the 2023-1 and will replace Professional Synergy agement (AR248) and gned to the Program ement so as to validate AR346) course, as part be incorporated into this	
Key:				

Related Program Learning Outcome: Professional Management

Validation Courses Process Courses

¹³⁸ Appendix 3.39: Rubric Real Estate Management (AR248)

¹³⁹ Appendix 3.40: Rubric Professional Synergy (AR295)

¹⁴⁰ Appendix 3.41: Rubric Lightweight Roofing and Formworks (AR346)

¹⁴¹ Appendix 3.42: Rubric Urban Management (AR303)



The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁴².

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

Program Response: See below the documents collected by UPC's Learning Culture and the School of Architecture's Learning and Teaching Culture:

- Quality Policy (Link)
- UPC's Educational Model (Link)
- Academic Freedom Policy (Link)
- UPC Diversity and Non-Discrimination Policy (Link)

As stated in UPC's Plan for Achieving Initial Accreditation - PAIA¹⁴³, including APR-IC 2019, the University acknowledges that its task focuses on three key elements: its faculty, students and staff, among which it promotes free debate on ideas in a respectful and tolerant environment, without fear of censorship or reprisals, as stated in its Quality Policy (Link), which establishes its commitment with the highest quality standards, as well as the guidelines and academic quality objectives with which it is committed at the institutional level so as to guide its academic activities.

UPC's Educational Model (<u>Link</u>) is geared towards educating students who will become competent professionals and upstanding leaders. UPC's School of Architecture seeks to educate architects with a wide perspective in terms of the creative process, through training that prepares them to apply the knowledge acquires, reflect on issues, and show critical awareness in terms of their actions and decisions. This model is summarized in five principles established by the University: competency-based learning, student-centered learning, independent and self-regulated learning, learning in diversity with a global vision, and learning towards sustainability.

UPC also holds an Academic Freedom Policy (<u>Link)</u>, which states that respect for other human beings implies taking an interest in understanding, learning, promoting, respecting and tolerating the timely and appropriate expression of various ideas. The latter applies specially to the field of design, where creative freedom, which must be prioritized in work environments, is highly important.

This learning culture is experiential and is encouraged and fostered in UPC's School of Architecture, in each of its three sites in which the program is offered, through:

- The promotion of creative freedom.
- Supportive academic relationships between students and their faculty.
- Tailored training in the architectural design workshops.
- A teaching-learning process in which students play an active role.
- The promotion of critical thinking, analysis, discussion, evaluation, presentation and interaction with their peers.
- A curriculum that articulates different areas (graphic expression, construction, urban planning, history and theory) within the framework of the architectural design workshops.

¹⁴² Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR295** – pp. 47-51, 113-117; **AR248** – pp. 52-56, pp. 118-122; **AR303** – pp. 17-21, pp. 88-92)

¹⁴³ Appendix 3.43: UPC Plan for Achieving Initial Accreditation



UPC's School of Architecture respects, encourages and values the diversity of ideas, perspectives and options; this approach allows broadening the perspective of architecture among UPC's academic community and fostering a teaching and learning environment strengthened through the exchange of ideas so as to promote creativity, commit faculty members and students with their learning process, and facilitate their integral development as architects and people.

Consequently, the School's teaching and learning culture is aligned with the requirements of PC.7 Learning and Teaching Culture. In addition to the latter, the School is committed to continuous improvement and has implemented the following evaluation instruments:

• Architectural Design Workshop Tour: which aims to validate a well-balanced, flexible and comprehensive training.

It consists of an exhibition of the final projects developed throughout the term within the framework of the program's design workshops with the participation of the Dean of the School, the Program Director, and the faculty members of the course, for discussion and review purposes.

The tour is carried out at the end of each academic term, i.e. every semester, and at each of UPC's sites (Monterrico, Villa and San Miguel). This is an ongoing self-evaluation that has been carried out since the School's inception in search of continuous improvement actions.

Appendix 3.44¹⁴⁴ shows a video sample of the 2021-2 workshop tour, which, due to the COVID-19 pandemic and the provisions and restrictions imposed by the Peruvian government, was conducted virtually.

- Coordination Meetings: with faculty members, held at least twice per academic term, and which are also a means of evaluating the learning culture, through the evaluation of contents, approaches and procedures. Meeting minutes are attached in Appendix 3.45¹⁴⁵.
- Meetings with Class Delegates: provides a space in which information is also gathered in order to evaluate the School's teaching-learning culture. The students of each section appoint one of their peers to represent them, as a classroom delegate, and shed critical light on the teaching-learning process and the progress made in different courses.

The School regularly meets with class delegates in order to provide information and listen to their concerns, suggestions and queries. In this regard, the minutes of the meetings held in 2020 and 2021 are attached in Appendix 3.35¹⁴⁶ as evidence of this periodic activity.

- Academic Survey: the School's teaching-learning process is also evaluated in each course by means of an academic survey, which focuses on the students' opinions regarding the academic development of the courses. This process is carried out twice in each academic term and the area coordinators meet with the faculty members who have obtained a grade below the average so as to propose any corresponding corrective actions. The format of the course and workshop survey is attached in Appendix 3.46¹⁴⁷ and 3.47¹⁴⁸.
- Alumni Focus Group: Every four years, the School of Architecture conducts a focus group with its alumni, addressing issues related to UPC's Educational Model within the framework of the Architecture program. See Appendix 3.48¹⁴⁹

¹⁴⁴ Appendix 3.44: Video sample of the 2021-2 workshop tour

¹⁴⁵ Appendix 3.45: Coordination Meetings Uploaded onto the 2021-2 System

¹⁴⁶ Appendix 3.35: Meeting Minutes with 2020 and 2021 Class Delegates

¹⁴⁷ Appendix 3.46: Academic Survey Form - Courses

¹⁴⁸ Appendix 3.47: Academic Survey Form - Workshops

¹⁴⁹ Appendix 3.48: Alumni Focus Group



This information is relevant in terms of the School's decision-making process and implementation of improvement actions.

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

Program Response: PC.8 Social Equity and Inclusion has been incorporated into the Program Learning Outcome of Grounded design and, consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁵⁰ and Appendix 3.2 NAAB PC/SC Matrix¹⁵¹).

Overall, as presented in the **Shared Values** section, UPC and its School of Architecture are made up of a talented and diverse group of students, faculty members and administrative staff. Diversity as a pillar may also provide a clear explanation on why it is being recognized for its contribution to higher education and the development of Peru.

UPC has always promoted diversity and is committed to creating an environment free from discrimination or any type of harassment based on race, diversity of thought, nationality, gender, socioeconomic status, sexual orientation, religion, age, disability or marital status. Diversity lays the foundations that support the University's core activities. Selecting students and hiring of faculty and administrative staff, including their recognition and any benefit or obligation hereunder, must be carried out without any bias based on the aforementioned. The latter has been established in its Diversity and Non-Discrimination Policy (link) and its Academic Freedom Policy (link).

Diversity, inclusion and the search for social equity in architecture, as well as attitudes of respect towards the environment, are instilled throughout the program in the design workshops – that is, from Workshop III - Architecture and Surroundings (AR307) to Workshop X - Thesis Workshop (AR304) taught in the tenth term.

In courses of the last terms of the program, such as Research in Architecture (AR349) and Professional Project Guidelines (AR271), the topics to be developed in the project to obtain the degree are analyzed within the context of diverse environments, focusing on the specific needs of different users in order to improve their living conditions. In other words, architecture as a means to develop social and economic activities, according to different locations and creating spaces that foster social equity and respect for natural areas and historical heritage. The latter are basic guidelines for the evaluation of the topics within the framework of the thesis projects to be developed.

In addition, as already mentioned in PC5, the research lines for thesis works (see Appendix 3.28¹⁵²), focus on three main topics: Housing, Education and Health, which allow delving into these areas, which are highly relevant for the development of Peru, and the social responsibility of UPC's School of Architecture within society.

¹⁵⁰ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁵¹ Appendix 3.2: NAAB PC/SC Matrix

¹⁵² Appendix 3.28: Meeting Minutes and Communiqué on Thesis Lines

NAB

For further details with regard to the diverse cultural and social contexts within the framework of theses to obtain the Bachelor's degree of Architecture students, refer to Appendix 3.32^{153} , 3.33^{154} y 3.34^{155} .

With regard to the evaluation, the validation course of PC8 Social Equity and Inclusion is Workshop VIII - Architecture and Cities (AR301). To ensure that students fully understand the relevance of PC8 in the validation course, students must know the diverse social and cultural contexts that lay the foundations to build inclusive environments, as evidenced in designs that take into account the social and cultural contexts in which they intervene and showcase the proposed relationship between architecture and its social and cultural environment.

The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.7 PC8 Assessment

Related Program Learning Outcome: Grounded design

Validation Courses		PC8. Social Equity and Inclusion		
	Course	2021-1 Results	2021-2 Results	Official Benchmark
AR301	Workshop VIII -	Passed: 37%	Passed: 21.8%	Increase
	Architecture and	Outstanding: 4%	Outstanding: 3.9%	Passed to 40%
	Cities			
CONTIN	UOUS IMPROVEMEN	ſ		
Conclusions and Improvement Opportunities		The evaluation is maintained in the validation course.		
Key:				
Validatio	on Courses			

Process Courses

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁵⁶.

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

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

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

Program Response: SC.1 Health, Safety and Welfare in the Built Environment has been incorporated into the School's Program Learning Outcome of: Technique and Construction, which is geared towards the application of technological systems and construction methods according to design, economy and performance criteria. Consequently, its evaluation is

¹⁵³ Appendix 3.32: Community Center in Comas (Abstract). The complete documentation is available at: Link

¹⁵⁴ Appendix 3.33: Community Center in Barranca (Abstract). The complete documentation is available at: Link

¹⁵⁵ Appendix 3.34: Agritourism lodge in Huaral (Abstract). The complete documentation is available at: Link

¹⁵⁶ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR301** – pp. 11-16, pp. 82-87)



incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁵⁷ and Appendix 3.2 NAAB PC/SC Matrix¹⁵⁸).

The validation courses of SC.1 are Workshop V - Architecture and Environment (AR309) and Workshop X - Thesis Workshop (AR304). In both courses, students must propose and support an architectural intervention according to environmental conditions related to habitability, welfare, and health and safety in architectural spaces, as showcased in the syllabi attached in Appendix 3.20^{159} y 3.49^{160} .

Among other improvement actions, the program has strengthened the Workshop V -Architecture and Environment (AR309) through projects in which the built environment modifies and impacts the natural environment; therefore, applying ecological and sustainability criteria in order to efficiently mitigate said impacts. The workshop puts emphasis on the natural environment, sustainability and passive means of climate control and adaptation to possible natural hazards. In addition, the workshop seeks to protect the natural environment from the impact generated by the building, which must be understood as a whole. Workshop V -Architecture and Environment (AR309), see rubric attached in Appendix 3.23¹⁶¹. As of 2022-1 the course will be evaluated within the framework of the One-on-One Assessment and the results will be analyzed through the EAC Visual Data software.

On the other hand, the Workshop X - Thesis Workshop (AR304) seeks to develop a project selected by the students – that is, an architectural proposal in which they must show that they are able to deal with the main aspects included in the development of an architectural project.

The first stage allows identifying the basic design criteria of an architectural pre-project taking into account the following aspects: conceptual, programmatic and user, environmental, urban and landscape. The second stage focuses on the development of the architectural pre-project, including the criteria in the fields of specialty related to structures, electrical and sanitary installations and evacuation systems. With regard to SC.1, a specific rubric was developed for its evaluation within the framework of the course (see Appendix 3.16¹⁶²).

The evaluation results of Workshop X- Thesis Workshop (AR304), benchmarks and conclusions regarding improvements are presented in the table below.

Validation Courses		SC1. Health, Safety and Welfare in the Built Environment		
Course		2021-1 Results	2021-2 Results	Official Benchmark
AR304	Workshop X - Thesis Workshop	Passed: 38.9% Outstanding: 46.5&	Passed: 55.9% Outstanding: 41.1%	Maintain % of Passed at 55.9% and Outstanding at 41.1%
AR309	Workshop V - Architecture and Environment	Assessm	nent One-on-One (202	2-1 Plan)

Table 3.8 SC1 Assessment

Related Program Learning Outcome: Technique and Construction

¹⁵⁷ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁵⁸ Appendix 3.2: NAAB PC/SC Matrix

¹⁵⁹ Appendix 3.20: Syllabus Workshop V - Architecture and Environment (AR309)

¹⁶⁰ Appendix 3.49: Syllabus Workshop X - Thesis Workshop (AR304)

¹⁶¹ Appendix 3.23: Rubric Workshop V - Architecture and Environment (AR309)

¹⁶² Appendix 3.16: Rubric Workshop X - Thesis Workshop (AR304)



CONTINUOUS IMPROVEMENT				
Conclusions and Improvement Opportunities	As Workshop X - Thesis Workshop is a capstone course, it provides evidence on the level of achievement of SC1; however, opportunities for improvement include adding the evaluation of Workshop V - Architecture and Environment, as it mainly focuses on SC1 training.			

Key:

Validation Courses

Process Courses

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁶³.

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

Program Response: SC.2 Professional Practice has been incorporated into the School's Program Learning Outcome of Professional Management, which identifies the different professionals involved in the execution of a project and work, taking into account the regulations and professional ethics codes. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁶⁴ and Appendix 3.2 NAAB PC/SC Matrix¹⁶⁵).

To ensure that students fully understand the relevance of SC.2 in the program, students must identify the norms and codes that govern the practice of architecture, and fully grasp their scope.

To ensure that students fully understand the relevance of SC.2 in the validation course, students must identify the norms and codes that govern the practice of architecture, and fully grasp their scope. As part of improvement actions, the program has designed a new course, called Project Management (AR350), within the framework of curricular changes. The course will be implemented in 2023-1.

During the transition period, two validation courses have been aligned to SC.2: Real Estate Management (AR248) and Professional Synergy (AR295), which are articulated with the Program Learning Outcome of Professional Management. Moreover, the evaluation rubrics have been modified so as to include SC2. The rubrics are attached in appendices 3.39^{166} y 3.40^{167} .

In terms of the approach to develop SC2 within the framework of these courses, it is worth mentioning the following:

• Real Estate Management (AR248): The course addresses the professional practice and training so that students understand how to manage an architectural project within the context of real estate investment taking into account legal, technical, economic, financial and commercial aspects, required for their professional development.

¹⁶³ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR304** – pp. 57-68, pp. 123-143)

¹⁶⁴ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁶⁵ Appendix 3.2: NAAB PC/SC Matrix

¹⁶⁶ Appendix 3.39: Rubric Real Estate Management (AR248)

¹⁶⁷ Appendix 3.40: Rubric Professional Synergy (AR295)



- **Professional Synergy (AR295):** The course develops skills that allow for adequate management of the professional activity, by fostering interaction between stakeholders involved in a project that may allow for synergy to emerge between the persons that contribute to the final result. Therefore, the course allows students to understand how professional management lays the foundations for future professionals.
- **Project Management (AR350):** Managing and developing a project involves professionals from different disciplines; therefore, in the case of projects involving architects, they must interact with other professionals from different fields of specialty, as well as clients, neighbors and other people who directly or indirectly contribute to the final result. Students must identify and analyze different aspects used to manage and develop a project, and become familiar with the basic principles of business practices, manage relationships between stakeholders involved or affected by the design process, and critically analyze any ethical and regulatory issues arising in the professional practice.

Likewise, the School has implemented, as of 2021-2, a series of mandatory advisory sessions for the students of Workshop X - Thesis Workshop (AR304) on U.S. Licensing Requirements. The advisory sessions are conducted by UPC's ALA, Arch. John Hertz. Students discussed topics related to U.S. licensing requirements, as shown in Table 3.9 below:

Week	Discussion with group 1 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
10/25/2021	Education.
Week	Discussion with group 2 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
11/01/2021	Education.
Week	Discussion with group 3 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates; Continuous
11/08/2021	Education.

Table 3.9: U.S. Licensing Advisory Sessions

In addition to the face-to-face advisory sessions, all students were provided with key information in order to ensure they understood the scope and the information provided. All students of the Workshop X - Thesis Workshop (AR304) had access to said information. Students may also seek support to the course coordinator so as to solve any questions or doubts that may arise.

The evaluation of the final assignments of all sections of the **Real Estate Management** (AR248) and **Professional Synergy (AR295)** courses is carried out through the One-on-One Assessment system¹⁶⁸.

The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

¹⁶⁸ Appendix 3.3: Assessment One-on-One Faculty Guide



Table 3.10 SC2 Assessment

Related Program Learning Outcome: Professional Management

Validation Courses	5	SC2. Professional Practice			
Course	2021-1 Results	2021-2 Results	Official Benchmark		
AR295 Professional Synergy	(Codes) Passed: 36.3% Outstanding: 55.3% (Business Processes) Passed: 53.1% Outstanding: 40.3%	(Codes) Passed: 32.7% Outstanding: 55.9% (Business Processes) Passed: 52.5%, Outstanding 39.6%	(Codes) Increase Passed to 40% (Business Process) Maintain Passed at 52.5% and Outstanding at 39.6% Maintain % of Passed		
Management	(Business Processes) Passed: 40% Outstanding: 60%	Outstanding: 48.4% (Business Processes) Passed: 55.7% Outstanding: 36.2% (Business Processes)	and Outstanding for Codes and Business Processes over 40%		
CONTINUOUS IMPROV	EMENT				
Conclusions and Improvement Opportunities	Project Management (through a curricular ch Management (AR248) a Until then, Real Estate (AR295) are aligned to Management so as to va	AR350) is being incorpor ange as of 2023-1 and w nd Professional Synergy (A Management (AR248) and the Program Learning O alidate and assess SC2.	ated into the program vill replace Real Estate R295). d Professional Synergy utcome of Professional		
Key:					
Validation Courses					
Process Courses					

The goals are reviewed on a yearly basis in order to allow for room for discussion between the School, coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁶⁹.

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

Program Response: SC.3 Regulatory Context has been incorporated into the School's Program Learning Outcome of Grounded design, which allows students to design and support an architectural proposal based on previous research and integrate the different variables involved in the project. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁷⁰ and Appendix 3.2 NAAB PC/SC Matrix¹⁷¹).

Upon conducting research on the users with whom they will work, students are encouraged to reflect on the main focus and location of the project. The construction process will allow them to become responsible professionals who are critical to innovation. The course allows students to implement highly complex projects and understand the real meaning of a project; therefore, enhancing and developing their abilities as architectural designers.

¹⁶⁹ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR295** – pp.47-51, pp. 113-117; **AR248** – pp. 52-56, pp. 118-122)

¹⁷⁰ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁷¹ Appendix 3.2: NAAB PC/SC Matrix

NAB

To ensure that students fully understand the relevance of SC3 within the framework of the validation course, Workshop IX - Professional Practice Workshop (AR302), students must make a design proposal that solves a series of challenges that may arise as a result of the location and environmental conditions, the building-city relationship, the construction systems applied, the codes and regulations related to buildings, and guidelines set forth in codes across North America. Students must show adequate use of professional documents and means of graphic expression.

For U.S. regulation purposes, students must carry out a project located in a city in the United States during the second half of the academic term within the framework of the Architectural Design, Workshop IX - Professional Practice Workshop (AR302).

Likewise, a rubric was designed so as to include SC3 within the Program Learning Outcome of Grounded design to be applied in Workshop IX -Professional Practice Workshop (AR302) (see Appendix 3.10¹⁷²).

In line with the above, the School saw fit to conduct a training session focusing on regulations in architecture in the United States for all faculty members who teach the Workshop IX - Professional Practice Workshop (AR302). Arch. John Hertz (ALA) is responsible for organizing the workshop, which will allow faculty members to acquire in-depth knowledge on the topic. The workshop will be conducted in an institutionalized manner during the first half of each academic term, as per the requirements set forth in Table 3.11 below:

Week / Term	Topics
1	AXP, IBC, IEEC, ADA, Zoning, IBC Ch. 1-3
2	IBC Ch. 4-5, Studio Project
3	IBC Ch. 6-7
4	IBC Ch. 8-10
5	IECC
6	IECC
8	ADA, Zoning,

Table 3.11 Schedule of the Faculty Training Workshop

The evaluation of SC3 was carried out was conducted under the One-on-One Assessment system¹⁷³ within the framework of Workshop IX - Professional Practice Workshop (AR302). The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.12 SC3 Assessment

Related Program Learning Outcome: Professional Management

Validation Courses		SC3. Regulatory Context			
	Course	2021-1 Results	2021-2 Results	Official Benchmark	
AR302	Workshop IX - Professional Practice Workshop	Passed: 33.7% Outstanding: 1.6%	Passed: 53.9% Outstanding: 0%	Maintain % of Passed over 50%	
CONTIN	CONTINUOUS IMPROVEMENT				
Conclusions and Improvement Opportunities		Maintain the evaluation in the course.			

¹⁷² Appendix 3.10: Rubric Workshop IX - Professional Practice Workshop (AR302)

¹⁷³ Appendix 3.3: Assessment One-on-One Faculty Guide



<u>Key:</u> Validation Courses Process Courses



The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁷⁴.

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

Program Response: SC.4 Technical Knowledge has been incorporated into the School's Program Learning Outcome of Technical Knowledge, which seeks to apply systems, technology and construction methods according to design, economy and performance criteria. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁷⁵ and Appendix 3.2 NAAB PC/SC Matrix¹⁷⁶).

To ensure that students acquire the SC.4 in core courses of the program, they must use all the technical documentation relevant to architects, and apply the different construction systems and technical processes within the framework of their projects and the execution of the work. Students must develop and design innovative solutions that solve the forms, assemblies and details required by the construction system of a project.

In terms of SC4 and the teaching-learning process, it is worth mentioning the following:

• Workshop X - Thesis Workshop (AR304) seeks to develop a project selected by the students – that is, an architectural proposal in which they must show that they are able to deal with the main aspects included in the development of an architectural project.

The first stage seeks to identify the basic design criteria of an architectural pre-project taking into account the following aspects: conceptual, programmatic and user, environmental, urban and landscape. The second stage focuses on the development of the architectural pre-project, including the criteria in the fields of specialty related to structures, electrical and sanitary installations, and evacuation systems.

• Structural Modeling II (AR341) allows future architects to define the structural system and pre-dimension structural elements. Upon completion of the course, students propose a structural system, pre-sizing its structural elements for a building project in accordance with technical criteria and current regulations.

The course allows students to understand how the architectural form of buildings affects their structure and its implication in seismic behavior, through the design and configuration of earthquake-resistant structures, using the necessary criteria for structural systems and pre-dimensioning of different structural elements in reinforced concrete buildings, and the application of current standards.

¹⁷⁴ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR302** – pp. 31-36, pp. 100-105)

¹⁷⁵ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁷⁶ Appendix 3.2: NAAB PC/SC Matrix



 AR346 Lightweight Roofing and Formworks allows students to understand theoretical and practical concepts related to construction to propose and design solutions to close the architectural space.

Students design proposals to close or cover the architectural space, which implies knowledge and the application of different construction systems for the enclosure of a project, with special emphasis on structural aspects and the use of reinforced concrete. The course seeks to enhance skills related to quantitative reasoning such as quantity management (metrics) and valuations (unit costs), so that students are prepared to face problems related to both design and construction procedures.

Upon completion of the course, students propose a roof design project, with emphasis on covering, based on the selection of the systems and materials studied, providing a reasonable solution tailored to their proposal.

In addition, based on the theoretical knowledge acquired in the course, students practice on a real-scale works in the Construction Workshop, using different materials and construction systems, which allow them to put into practice what they have learned and assess the scope and limitations of each construction system within the framework of a work.

The courses identified within the framework of SC.4 are as follows: Workshop X - Thesis Workshop (AR304), Lightweight Roofing and Formworks (AR346) and Structural Modeling II (AR341).

A rubric was designed to include SC.4 Technical Knowledge in the Program Learning Outcome of Technical Knowledge for each of the aforementioned courses:

- Rubric Workshop X Thesis Workshop (AR304) (See Appendix 3.16¹⁷⁷)
- Rubric Lightweight Roofing and Formworks (AR346) (See Appendix 3.41¹⁷⁸)
- Rubric Structural Modeling II (AR341) (See Appendix 3.50¹⁷⁹)

The evaluation of SC4 was carried out in the final assignments of all sections of Workshop X - Thesis Workshop (AR304). The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.13 SC4 Assessment

Related Program Learning Outcome: Technique and Construction

Validation Courses		SC4. Technical Knowledge		
Course		2021-1 Results	2021-2 Results	Official Benchmark
AR304	Workshop X - Thesis Workshop	Passed: 72.6% Outstanding: 1.1%	Passed: 49.4% Outstanding: 6.9%	Increase Passed at 60%
AR341	Structural Modeling II	Assessment One-on-One (2022-1 Plan)		
AR346	Lightweight Roofing and Formworks	Assessment One-on-One (2022-1 Plan)		
CONTIN	UOUS IMPROVEMENT			
Conclusions and Improvement Opportunities		An evaluation through the one-on-one assessment will be included in the Structural Modeling II (AR341) and Lightweight Roofing and Formworks (AR346) courses in order to monitor the progress made by students.		

¹⁷⁷ Appendix 3.16: Rubric Workshop X - Thesis Workshop (AR304)

¹⁷⁸ Appendix 3.41: Rubric Lightweight Roofing and Formworks (AR346)

¹⁷⁹ Appendix 3.50: Rubric Structural Modeling II (AR341)

NAB

<u>Key:</u> Validation Courses Process Courses



As part of the program's improvement actions in 2022-1, an evaluation through the one-on-one assessment will be included in the Structural Modeling II (AR341) and Lightweight Roofing and Formworks (AR346) courses in order to monitor the progress made by students.

The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁸⁰.

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

Program Response: SC.5 Design Synthesis has been incorporated into the School's Program Learning Outcome of Grounded design, which allows students to design and support an architectural proposal based on previous research and integrate the different variables involved in the project. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁸¹ and Appendix 3.2 NAAB PC/SC Matrix¹⁸²).

In terms of **SC5** and the teaching-learning process, it is worth mentioning the following:

• Workshop VII - Integration Workshop (AR310) is a course taught at the seventh level of the architectural design workshops, which constitute the backbone of the course. At previous levels, each workshop includes a key topic (as defined in each workshop's name): Introduction to Architectural Design, Architecture and Art, Architecture and Surroundings, Architecture and Functionality, Architecture and Environment, and Architecture and Construction.

At this level, the course allows students to acquire experience so as to comprehensively apply the six previous topics into an architectural project. This course allows students to understand the relevance of each topic throughout the design process.

In addition, students focus on larger and more complex projects, such as hospital buildings, hybrid buildings and large-scale theaters. The workshop focuses on the search for and implementation of a design methodology in a rigorous and comprehensive manner, which allows students to understand the different levels within a methodology and determine the best path to achieving their objectives.

Upon completion of the course, students develop comprehensive architectural proposals, adding value to sites and their surroundings, at a cultural and environmental level, and embracing a creative and proactive attitude. Within the framework of the evaluation, students must conceive a design that involves and synthesizes all the requirements of an architectural project and support the latter in a comprehensive manner.

¹⁸⁰ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR304** – pp. 57-68, 123-143)

¹⁸¹ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁸² Appendix 3.2: NAAB PC/SC Matrix



- Workshop IX Professional Practice Workshop (AR302) seeks to develop architectural proposals until reaching a level of development that involves decision-making when completing a professional project (selection of materials, specifications and construction details) until the preparation of the "technical file," therefore including SC5 in the students' professional training.
- Workshop X Thesis Workshop (AR304) seeks to develop a project selected by the students that is, an architectural proposal in which they must show that they are able to deal with the main aspects included in the development of an architectural project.

The first stage seeks to identify the basic design criteria of an architectural pre-project taking into account the following aspects: conceptual, programmatic and user, environmental, urban and landscape. The second stage focuses on the development of the architectural pre-project, including the criteria in the fields of specialty related to structures, electrical and sanitary installations, and evacuation systems.

The validation courses of SC.5 are as follows: Workshop X - Thesis Workshop (AR304), Workshop IX - Professional Practice Workshop (AR302) and Workshop VII - Integration Workshop (AR310), in which students must make design decisions in architectural projects that briefly reflect the various user, regulatory, accessibility and environmental requirements.

With regard to the evaluation, a rubric was designed to incorporate SC5 in the Program Learning Outcome of Grounded design for each course:

- Rubric Workshop VII Integration Workshop (AR310) (See Appendix 3.51¹⁸³)
- Rubric Workshop IX Professional Practice Workshop (AR302) (See Appendix 3.10¹⁸⁴)
- Rubric Workshop X Thesis Workshop (AR304) (See Appendix 3.16¹⁸⁵)

The results of the evaluation of the assignments submitted in each section of the three courses, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.14 SC5 Assessment

Related Program Learning Outcome: Grounded design

Validation Courses		SC5. Design Synthesis			
	Course		2021-1 Results	2021-2 Results	Official Benchmark
AR304	Workshop X - T Workshop	hesis	Passed: 62.1% Outstanding: 7.4%	Passed: 70% Outstanding: 7.5%	Maintain % of Passed over 70%
AR302	Workshop IX - Professional Pra Workshop	actice	Passed: 37.4% Outstanding: 2.1%	Passed: 37.7% Outstanding: 1.8%	Increase Passed at 50%
AR310	Workshop VII - Integration Wor	kshop	Passed: 34.4% Outstanding: 7.4%	Passed: 44.8% Outstanding: 5.9%	Increase Passed at 50%
CONTIN	IUOUS IMPROVI	EMENT			
Conclusions and Improvement Opportunities		ities	Maintain the evaluation	in the aforementioned	d courses.
Key:					
Validation Courses					
Process Courses					

¹⁸³ Appendix 3.51: Rubric Workshop VII - Integration Workshop (AR310)

¹⁸⁴ Appendix 3.10: Rubric Workshop IX - Professional Practice Workshop (AR302)

¹⁸⁵ Appendix 3.16: Rubric Workshop X - Thesis Workshop (AR304)



The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁸⁶.

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

Program Response: SC.6 Building Integration has been incorporated into the School's Program Learning Outcome of: Technique and Construction, which is geared towards the application of technological systems and construction methods according to design, economy and performance criteria. Consequently, its evaluation is incorporated into the program evaluation process (see Appendix 3.1 PC&SC, PLO and Courses/Activities Integration Matrix¹⁸⁷ and Appendix 3.2 NAAB PC/SC Matrix¹⁸⁸).

In order for students to acquire the SC6 Building Integration, the program's teaching-learning process allows students to make design decisions in architectural projects, therefore integrating construction, structural and environmental control systems with innovative solutions.

The validation courses aligned with SC6 are as follows: Workshop X - Thesis Workshop (AR304), Workshop IX - Professional Practice Workshop (AR302) and Workshop VI - Architecture and Construction Workshop (AR313). With respect to the latter, it is worth mentioning that:

 Workshop VI - Architecture and Construction Workshop (AR313) allows students to acquire knowledge on the construction requirements of architectural projects and the application and coordination of structural systems so as to articulate the different levels of construction works in a logical and viable manner. Construction works involve deciding on a structural logic, based on the behavior of the material and architectural expression in coherence with the theme – organization and functioning – and the location.

Students must design small office buildings, factories, shopping malls, clinics and sports centers, among others in order to develop architectural proposals whose conception involves the need to reflect on adequate structural systems and the correct dimensioning of material needs for the project.

The project involves a logical conception taking into account structural and construction aspects. The project also focuses on the relationship between each aspect with spatial and formal decision-making. Upon completion of the course, within the framework of the evaluation of SC6, students must design a comprehensive architectural solution for different construction, structural and environmental systems, with innovative solutions. See syllabus appendix 3.52¹⁸⁹.

Within the framework of Workshop IX - Professional Exercise Workshop (AR302), in
order to evaluate SC6, students must conceive a design including an integral architectural
solution for different construction and structural systems. For the purposes of the technical
file to be submitted, it is key for students to include the structural construction systems,

¹⁸⁶ Appendix 3.4: PC&SC 2021 Assessment Results Report (**AR304** – pp. 57-68, pp. 123-143; **AR302** – pp. 31-36, pp. 100-105; **AR324** – pp. 4-10, pp. 76-81)

¹⁸⁷ Appendix 3.1: PC&SC, PLO and Courses/Activities Integration Matrix

¹⁸⁸ Appendix 3.2: NAAB PC/SC Matrix

¹⁸⁹ Appendix 3.52: Syllabus Workshop VI - Architecture and Construction (AR313)



installations and all other materials required for the building and their appropriate technical use. See syllabus attached in Appendix 3.9¹⁹⁰.

 Workshop X - Thesis Workshop (AR304) seeks to develop a project selected by the students – that is, an architectural proposal in which they must show that they are able to deal with the main aspects included in the development of an architectural project. See syllabus appendix 3.49¹⁹¹.

In order to evaluate SC.6 Building Integration, a rubric was designed to include the latter in the Program Learning Outcome of Technique and Construction in each course. See:

- Rubric Workshop X Thesis Workshop (AR304) (See Appendix 3.16¹⁹²)
- Rubric Workshop IX Professional Practice Workshop (AR302) (See Appendix 3.10¹⁹³)
- Rubric Workshop VI Architecture and Construction Workshop (AR313) (See Appendix 3.52¹⁹⁴)

The evaluation of SC6 was carried out in the final assignments of all sections of Workshop X - Thesis Workshop (AR304) and Workshop IX - Professional Practice Workshop (AR302). The results of the evaluation, benchmarks and conclusions regarding improvements are presented in the following table:

Table 3.15 SC6 Assessment

Validation Courses		SC6. Building Integration			
	Course	2021-1 Results	2021-2 Results	Official Benchmark	
AR304	Workshop X - Thesis Workshop	Passed: 71.6% Outstanding: 5.3%	Passed: 64.4% Outstanding: 0.6%	Increase Passed at 70%	
AR302	Workshop IX - Professional Practice Workshop	Passed: 32.1% Outstanding: 1.6%	Passed: 32.3% Outstanding: 0%	Increase Passed at 50%	
AR313	Workshop VI - Architecture and Construction	Assessment One-on-One (2022-1 Plan)			
CONTIN	CONTINUOUS IMPROVEMENT				
Conclusions and Improvement Opportunities		Maintain the evaluation in the courses and include Workshop VI - Architecture and Construction.			
Key:					

Related Program Learning Outcome: Technique and Construction

As part of the program's improvement actions as of 2022-1, evaluations through the One-on-One Assessment system in the Workshop VI - Architecture and Construction Workshop (AR313) will be included in order to monitor the progress made by students.

Validation Courses Process Courses

¹⁹⁰ Appendix 3.9: Syllabus Workshop IX - Professional Practice Workshop (AR302)

¹⁹¹ Appendix 3.49: Syllabus Workshop X - Thesis Workshop (AR304)

¹⁹² Appendix 3.16: Rubric Workshop X - Thesis Workshop (AR304)

¹⁹³ Appendix 3.10: Rubric Workshop IX - Professional Practice Workshop (AR302)

¹⁹⁴ Appendix 3.53: Rubric Workshop VI - Architecture and Construction (AR313)



The established benchmarks are reviewed on a yearly basis by the School in collaboration with course coordinators, faculty members and other stakeholders. The report of the evaluations carried out in 2021-1 and 2021-2 are shown in Appendix 3.4¹⁹⁵.

¹⁹⁵ Appendix 3.4: PC&SC 2021 Assessment Results Report (AR304 – pp. 57-68, pp. 123-143; AR302 – pp. 31-36, pp. 100-105)



4—Curricular Framework

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

4.1 Institutional Accreditation

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

Program Response: Universidad Peruana de Ciencias Aplicadas -UPC, has been accredited by the WASC Senior College and University Commission (WSUC) since 2016. See Appendix 4.1¹⁹⁶ The University is currently in the process of re-accreditation.

4.2 Professional Degrees and Curriculum

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

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

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

Program Response: Regarding the *professional studies courses*, which refer to mandatory courses in the Architecture program, Table 4.1 below provides further details with respect to the code, course and credits of each course included in the category of professional studies, as defined by NAAB.

Table 4.1 Bachelor's Program of Architecture: Curricular Map, Mandatory Professional Studies Courses

Degree: Bachelor of Architecture				
Mandatory Professional Studies Courses				
Course #s & Titles	Crds			
AR287 - Artistic and Spatial Expression	7			
AR305 - Workshop I - Introduction to Architectural Design	4			
AR351 - Architectural Drawing	5			
AR01 - Introduction to Architecture	3			
AR334 - Workshop II - Architecture and Art	4			
AR335 - Architectural Analysis	3			
AR336 - Art and Architecture from Ancient Times to the Middle Ages	3			
AR337 - Structural Modeling I	3			
AR307 - Workshop III - Architecture and Surroundings	6			
AR339 - Art and Architecture from the Middle Ages to the Renaissance	3			
AR342 - Understanding CAD	3			

¹⁹⁶ Appendix 4.1: UPC Institutional Accreditation - WASC Action Letter

NMB

Degree: Bachelor of Architecture

Mandatory Professional Studies Courses

Course #s & Titles	Crds
AR341 - Structural Modeling II	3
AR340 - Preliminary Works	4
AR308 - Workshop IV - Architecture and Functionality	5
AR344 - Masonry	3
AR343 - Art and Architecture from Baroque to Art Nouveau	3
AR293 - Installations in Buildings	3
AR309 - Workshop V - Architecture and Environment	6
AR110 - Peruvian Architecture	4
AR345 - Modern and Contemporary Art and Architecture	3
AR313 - Workshop VI - Architecture and Construction	5
AR346 - Lightweight Roofing and Formworks	3
AR161 - Conservation of the Immovable Cultural Heritage	3
AR348 - Wood Construction and Finishes	3
AR310 - Workshop VII - Integration Workshop	6
AR284 - Urban Planning	4
AR318 - Special Equipment and Installations	3
AR303 - Urban Management	3
AR349 - Research in Architecture	6
AR301 - Workshop VIII - Architecture and Cities	7
AR350 - Project Management	3
AR271 - Professional Project Guidelines	4
AR272 - Urban Planning Seminar	4
AR302 - Workshop IX - Professional Practice Workshop	7
AR304 - Workshop X - Thesis Workshop	7
AR112 - Theory of Architecture	4
Total professional courses credits	150

Detailed information on the courses is available in Appendix 4.2¹⁹⁷.

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

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

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

Program Response: The curriculum of the Architecture bachelor program acknowledges the importance of general studies in the training of its students, which is why it includes the

¹⁹⁷ Appendix 4.2: Couse Description



following mandatory courses defined as general studies, which can be reviewed in Appendix 4.2^{198} .

- HU548 Ethics and Citizenship
- MA618 Basic Mathematics
- MA619 Differential Calculus
- MA651 Physics
- MA621 Integral Calculus
- AR338 Sustainability and Environment
- AR347 Research Methodology

The Bachelor program in Architecture requires students to complete 35 credits of general studies, which is in line with what the requirements of UPC's Credit-Hours Policy (See Appendix 4.3^{199}) and Article 41^{200} of University Law No. 30220 (See Appendix 4.4^{201}). For further information on both norms, refer to Table 4.2.

Table 4.2 Comparison between academic credit regulations required to obtain the Bachelor's degree.

Categories	University Law No. 30220	UPC's Hours-Credits Policy			
General	35 credits	35 credits			
Studies	(<u>minimum</u> required by law)	(<u>minimum</u> required by UPC's Policy)			
Specific Studies (*)	165 credits (minimum required by law)	 165 credits divided into: 150 credits specific-mandatory 15 credits specific-elective 			
TOTAL	200 credits	200 credits			

(*) In terms of NAAB conditions they are equivalent to Professional and Optional/Elective studies.

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

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

Program Response: Regarding optional courses, which must be understood as elective courses within the framework of the program, students are required to take an elective course of at least three credits in the sixth, seventh, eighth, ninth and tenth terms in order to earn a total of 15 credits, for which they can choose from the following elective courses offered by the Architecture program:

AR285 Architectural Acoustics

¹⁹⁸ Appendix 4.2: Couse Description

¹⁹⁹ Appendix 4.3: UPC's Credit-Hours Policy

²⁰⁰ Peruvian University Law N°30220: Article 41: Undergraduate General Studies: General studies are mandatory. Their duration must be equivalent to at least 35 credits. Their purpose is the comprehensive training of students.

²⁰¹ Appendix 4.4: University Law No. 30220



- AR232 Vernacular Architecture
- AR57 Peruvian Art
- AR225 Public Art
- AR168 Sketches
- AR91 Advanced CAD
- AR170 City of Lima
- AR203 Color and Perception
- AR231 Architectural Sketch
- AR152 Infographics
- AR104 Landscape Management
- AR61 CAD Modeling and Animation
- AR93 Construction Drawings
- AR58 Post-Production
- AR171 Architectural Presentation
- AR233 Programming and Digital Fabrication

Students of the Architecture program may, in addition to choosing among the aforementioned elective courses, opt for elective courses offered by the other undergraduate programs in the following Schools: Hospitality and Tourism Administration, Contemporary Arts, Human Sciences and Education, Health Sciences, Communications, Law, Design, Economics, Engineering, and Business.

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

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

Program Response: UPC offers the following programs in architecture:

- Bachelor's degree in Architecture (in the process of accreditation with NAAB).
- Master's degree in Architecture.

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

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

Program Response: At this point, it is worth mentioning the legal framework that regulates higher education in Peru – that is, University Law No. 30220 (See Appendix 4.4²⁰²), of which Article 39 sets forth the following provisions regarding the university study regime:

"Article 39. Study Regime: "The study regime is established in the Bylaws of each university, preferably under a term-based system, per credits and with a flexible

²⁰² Appendix 4.4: University Law No. 30220



curriculum. It can be delivered under the following modalities: face-to-face, blended or distance education.

Academic credits measure the educational time required for students to acquire theoretical and practical knowledge.

For face-to-face studies, an academic credit is equivalent to a minimum of sixteen (16) teaching hours of theoretical class sessions or twice as many hours of practical class sessions.

The academic credits of other study modalities are equivalent to the teaching load defined for face-to-face studies.

Credits are calculated considering face-to-face class hours (in the classroom), differentiating between theoretical and practical class sessions so that one credit equals one hour of theoretical class session or two hours of practical class session."

In accordance with these regulations, UPC has established an Hours-Credit Policy (See Appendix 4.3²⁰³) that defines the credit value of each course:

- a. 16 teaching hours of scheduled theoretical class session²⁰⁴ are equivalent to 01 credit.
- b. 32 teaching hours of scheduled practical class sessions²⁰⁵ are equivalent to 01 credit.

UPC has developed a term-based study system for Undergraduate Studies. Each academic term is made up of 16 weeks. The Architecture program is structured in 10 academic terms.

The Architecture program's credit distribution for each category is detailed in Table 4.3, whereas the Architecture program's curricular map and course distribution in these three categories is attached in Table 4.4.

Table 4.3. Bachelor's Program of Architecture:

Categories	No. of credits
General Studies:	35 credits
Professional Studies:	150 credits
Optional/Elective Studies:	15 credits
Total Program Credits	200

Table 4.4 Bachelor's Program of Architecture: Curricular Map and Course Distribution

Degree: Bachelor of Architecture					
Mandatory Professional Studies Courses		Elective Courses		General Studies Courses	
Course #s & Titles	Crds	Course #s & Titles	Crds	Course #s & Titles	Crds
AR287 - Artistic and Spatial Expression	7	AR285 Architectural Acoustics	3	MA618 - Basic Mathematics	7
AR305- Workshop I - Introduction to Architectural Design	4	AR232 - Vernacular Architecture	3	HU548 - Ethics and Citizenship	2
AR351 - Architectural Drawing	5	AR152 - Infographics	3	MA619 - Differential Calculus	4
AR01 - Introduction to Architecture	3	AR225 - Public Art	3	MA651 - Physics	5
AR334 - Workshop II - Architecture and Art	4	AR168 Sketches	3	MA621 - Integral Calculus	4

²⁰³ Appendix 4.3: UPC's Credit-Hours Policy

²⁰⁴ As per UPC's Hours-Credit Policy, scheduled theoretical class sessions include face-to-face or online spaces that allow for student-faculty interaction, where new knowledge, skills and attitudes are developed.

²⁰⁵ As per UPC's Hours-Credit Policy, scheduled practical class sessions include face-to-face or online spaces that allow students to actively participate in the application and integration of the knowledge, skills and attitudes acquired.



Degree: Bachelor of Architecture					
Mandatory Professional Studies Courses		Elective Courses		General Studies Courses	
AR335 - Architectural Analysis	3	AR91 Advanced CAD	3	AR338 - Sustainability and Environment	4
AR336 - Art and Architecture from Ancient Times to the Middle Ages	3	AR170 - City of Lima	3	HU543 - Language Comprehension and Production I	4
AR337 - Structural Modeling I	3	AR57 - Peruvian Art	3	AR347 - Research Methodology	5
AR307 - Workshop III - Architecture and Surroundings	6	AR231 - Architectural Sketch	3		
AR339 - Art and Architecture from the Middle Ages to the Renaissance	3	AR203 - Color and Perception	3		
AR342 - Understanding CAD	3	AR104 - Landscape Management	3		
AR341 - Structural Modeling II	3	AR61 - CAD Modeling and Animation	3		
AR340 - Preliminary Works	4	AR93 - Construction Drawings	3		
AR308 - Workshop IV - Architecture and Functionality	5	AR58 - Post-Production	3		
AR344 - Masonry	3	AR171 - Architectural Presentation	3		
AR343 - Art and Architecture from Baroque to Art Nouveau	3	AR233 - Programming and Digital Fabrication	3		
AR293 - Installations in Buildings	3	(*) Elective courses from other UPC programs	3		
AR309 - Workshop V - Architecture and Environment	6				
AR110 - Peruvian Architecture	4				
AR345 - Modern and Contemporary Art and Architecture	3				
AR313 - Workshop VI - Architecture and Construction	5				
AR346 - Lightweight Roofing and Formworks	3				
AR161 - Conservation of the Immovable Cultural Heritage	3				
AR348 - Wood Construction and Finishes	3				
AR310 - Workshop VII - Integration Workshop	6				
AR284 - Urban Planning	4				
AR318 - Special Equipment and	3				
AR303 - Urban Management	3				
AR349 - Research in Architecture	6				
AR301 - Workshop VIII - Architecture and Cities	7				
AR350 - Project Management	3				



Degree: Bachelor of Architecture Mandatory Professional Studies Elective Courses General Studies Courses Courses AR271 - Professional Project 4 Guidelines AR272 - Urban Planning Seminar 4 AR302 - Workshop IX - Professional 7 Practice Workshop AR304 - Workshop X - Thesis 7 Workshop AR112 - Theory of Architecture 4 Total professional courses 150 **Total elective studies** 15 Total general studies 35 credits courses credits required credits Total # of degree credits: 200

4.2.5 Master of Architecture.

Program Response: N.A.

4.2.6 Doctor of Architecture.

Program Response: N.A.

4.3 Evaluation of Preparatory Education

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

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

See also Condition 6.5

Program Response: UPC has implemented an Admission Policy for Undergraduate Programs (SICA-PYL-08)²⁰⁶, which establishes the rules and conditions that regulate UPC's admissions process in order to select applicants who meet the requirements set forth in the national law and UPC's bylaws for admission to the University.

UPC's admission policy defines two admissions modalities: ordinary and extraordinary:

- <u>Ordinary:</u> The ordinary admissions process to UPC (general admission) takes place through a public contest. The public contest refers to a knowledge exam as the main mandatory channel (admission exam), which constitutes a comprehensive evaluation of the applicants.
- <u>Extraordinary</u>: The extraordinary admissions process includes the following extraordinary modalities, which are described in detail in the Admission Policy for Undergraduate Programs (SICA-PYL-08):

²⁰⁶ Appendix 4.5: Admission Policy for Undergraduate Programs (SICA-PYL-08)



- International Agreement
- Preferred Selection²⁰⁷
- External Transfer and Academic Degree²⁰⁸ and Professional Title Exemption
- PRONABEC²⁰⁹ Programs

The comprehensive evaluation, whose topics list for the 2022-1 admissions process may be reviewed in Appendix 4.7^{210} , allows students admitted to the university – according to the score obtained – to access program-specific courses in the first term; in case their score was not sufficient, they must take remedial courses in mathematics, language and/or physics.

In addition, applicants to the Architecture program are assessed through UPC's aptitude test for architecture students, as indicated in the 2022-1 admissions process on the program's website (See Appendix 4.8²¹¹). Applicants who do not achieve the minimum score required must take the following remedial courses²¹²: AR206 Architectural Vocational Aptitude Workshop and AR242 Introduction to Sketching.

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

Program Response: N.A.

UPC's Architecture program aims at developing different learning outcomes throughout the teaching-learning process and the courses. Therefore, students are not required to have acquired any of the learning outcomes in their previous training.

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

Program Response: Admission policies and procedures are clearly stated in a transparent manner and accessible to all participants on the University's website, and are coherent with the program's mission, expected results, and strategies. UPC's Admission Policy for Undergraduate Programs (SICA-PYL-08)²¹³.

All information regarding the School of Architecture and its Bachelor's program is available to the general public on the University's website at the following <u>link</u>.

With regard to UPC's aptitude test for architects, the information is made public and is available on the program's admissions website (See Appendix 4.8²¹⁴).

The test requires applicants to submit a virtual portfolio with assignments that must contain the following:

• Photographs of architectural / design works: sketches, 3Ds, mock-ups.

²⁰⁷ <u>Preferred Selection</u>: It should be noted that the first and second place, by order of merit, of secondary-level educational institutions of each region are exempted from any offers of admission under the Admission Process, and are admitted according to the provisions set forth in the current legislation and UPC's procedures regarding the Preferred Selection modality.

²⁰⁸ Appendix 4.6: Course Validation Guidelines (Undergraduate)

²⁰⁹ <u>PRONABEC</u> refers to the National Scholarships and Educational Credit Program

²¹⁰ Appendix 4.7: Topics List of the Admissions Exam

²¹¹ Appendix 4.8: Admissions Process Available on the Program's Website (Link)

²¹² Appendix 4.9: Syllabus AR206 Architectural Vocational Aptitude Workshop and AR242 Introduction to Sketching

²¹³ Appendix 4.5: Admission Policy for Undergraduate Programs (SICA-PYL-08)

²¹⁴ Appendix 4.8: Admissions Process Available on the Program's Website (Link)



- Photographs of art works: painting, photography, sculpture.
- Awards

Applicants must explain the works and what they represent in maximum 2 lines.

The rubric of aptitude test for architects focuses on the following elements:

- <u>Artistic aptitudes:</u> aesthetic sensitivity in their relationship to things / creative response to a problem.
- <u>Expressive and technical aptitudes:</u> graphic expression / visual and spatial ability / ability in the use of materials / basic structural logic comprehension.
- <u>Critical vocation:</u> critical thinking towards a given reality / intention to transform reality.
- <u>Motivation defined by the program</u>: attention paid to the architectural space / previous knowledge of architecture.

For further details with regard to the test, the rubric is attached to Appendix 4.10²¹⁵ and the grading template of the aptitude test for architects to Appendix 4.11²¹⁶, including a sample of the portfolios in Appendix 4.12²¹⁷.

²¹⁵ Appendix 4.10: Rubric of the Aptitude Test for Architects

²¹⁶ Appendix 4.11: Grading Template of the Aptitude Test for Architects

²¹⁷ Appendix 4.12: Portfolio Sample - Aptitude Test for Architects

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5—Resources

5.1 Structure and Governance

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

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

Program Response: UPC is governed by an independent Governing Board responsible for ensuring the academic quality, sustainability and integrity of UPC. The Governing Board is responsible for the management and legal representation of the University, with the sole exception of matters expressly designated to its assembly of shareholders.

The Governing Board appoints the CEO and Rector of the University. At present, Edward Roekaert is UPC's CEO and Rector. The Rector is the highest authority responsible for all academic organizational structures, its governance, direction and quality assurance, whereas the CEO is responsible for the University's administrative and organizational structure, including financial matters.

With regard to the academic organizational structure, there are two Vice-Rectors who report directly to the Rector of the University.

- The Vice-Rector for Planning and Academic Development (VRPAD).
- The Vice Rector for Research and Academic Affairs, who is responsible for promoting and developing research and knowledge production at the University, leading all academic programs, and overseeing the Educational Quality department.
- The Quality Assurance Director, who is responsible for the Institutional Research Office, Accreditation, Program Review and the University's Quality integrated System (SICA).
- The School General Director, to whom all UPC's School Deans report.

See UPC's organizational chart in Appendix 5.1²¹⁸.

The organizational structure and the administrative chain of command within the School of Architecture give the program sufficient operational independence to operate in efficient and effective manner. The Architecture program has appointed its own Dean, Program Director, Faculty and Staff.

- The Dean of the School of Architecture is Arch. Miguel Cruchaga, who reports to the School General Director and is responsible for the smooth operation of the academic program. To this end, the Dean works closely with the Program Director, Arch. Mario Segami, in order to develop a strategic plan, prepare the annual budget, monitor retention, attrition and graduation rates, review the curriculum, and assess the progress made with regard to the targets and results of the strategic goals set for the Architecture program.
- The Program Director is responsible for designing and managing each program's annual budget wherein new staffing needs for the upcoming year are included based on the program's strategic plan and objectives, the expected enrollment, and faculty and staff workload, among other requirements.

To better understand the organizational and governance structure of the School of Architecture, see Appendix 5.2^{219} .

²¹⁸ Appendix 5.1: Organizational Chart - Rector's Office

²¹⁹ Appendix 5.2: Organizational Structure of the School of Architecture

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

Program Response: The program's faculty is made up of full-time and part-time faculty members responsible for the training of students through the development of the program learning outcomes. The School of Architecture's faculty plays a key role by using its professional and academic experience to enrich the curriculum, syllabi, and incoming and graduate student profiles.

Full-time faculty (FTF), in addition to their teaching workload, have been assigned four different roles considering their responsibilities within the School and the program. To that end, the teaching workload has been adjusted to keep an efficient balance between their duties. The four roles are as follows:

- <u>FTF-Staff</u> provide support to the Program Director in terms of the execution and supervision of the program or school's strategic and operation plan, putting emphasis on the achievement of the student's learning objectives and compliance with UPC's Educational Model.
- <u>FTF-Campus</u> act on behalf of the Dean and Director of the Architecture program in each campus/site (Monterrico, Villa and San Miguel) by providing support and supervising the academic activities organized by the program and the School. They hold coordination meetings once a week with the Program Director and FTF-Staff.
- <u>FTF-Research</u> develop and lead scientific research projects to be published in journals in collaboration with faculty members and students so as to strengthen the University's research lines.
- <u>FTF-Construction Workshop</u> coordinate with the faculty members of the construction workshop and the Program Director, are responsible for the development of the workshop, academic activities related to the contents of the construction courses, review and improve the syllabi and evaluations, propose equipment acquisitions, hire staff, and ensure compliance with standards in all three campuses/sites (Monterrico, Villa and San Miguel). They must comply with a 30-hour weekly teaching schedule.

Full and part-time faculty members engage in decision-making by providing feedback on the teaching-learning process, policies and processes. They identify improvement opportunities for the courses, assess student performance, and propose improvement actions to be included in the program's Assessment Plan. They participate in coordination meetings held per area at least twice per term. In addition, they participate in different committees, such as the Committee of Experts within the framework of the assessment process, the Accreditation Committee, or the Assessment and Curricular Change Committee. In conclusion, faculty plays a key role in the activities carried out by the School and, in general, by the University. See appendix 5.3²²⁰ for the School of Architecture Committees.

Architecture students, and UPC students in general, take part in the development of the University's policies and decisions by providing feedback on the teaching-learning process, extracurricular activities, tutoring sessions, and counseling. The latter is achieved through meetings with class delegates (held once per term), meetings with students (focusing on student and program initiatives), academic surveys (conducted twice per term), and program surveys. In addition, student opinions and contributions are included in the School's decision-making through the Net Promoter Score (NPS) survey results.

²²⁰ Appendix 5.3: School of Architecture Committees



The School's administrative staff plays a key role in operating the program. Administrative staff includes the following positions:

- <u>Modeling Workshop Assistants</u> manage the workshops and the warehouse, assist students so that they can make better use of the workshops, and supervise the students' work. They also provide support in different academic activities, such as conferences, presentations, and end-of-program activities and their dissemination.
- <u>Construction Workshop Assistants</u> are responsible for coordinating with the FTF-Construction Workshop in terms of logistical management of the workshops, as well as providing support to faculty members and students in the development of the practical sessions.
- <u>Construction Workshop Technicians</u> are field staff who prepare the locations where the labs and field practices will take place. They must place prevention safety signs and other safety elements before the construction practical sessions. The collaborate in terms of prevention measures so that the field construction activities are developed without any accidents and provide support to faculty members and students in tasks related to the construction practical sessions.

Finally, they provide support in terms of storing, cleaning and organizing the material in the practice areas. They are responsible for making an inventory plan and keeping the location of the materials per environment up-to-date at the start of each academic term, keeping a record and controlling the materials in terms of repairs, maintenance, warranty, loans, etc.

5.2 Planning and Assessment

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

5.2.1 The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts. **5.2.2** Key performance indicators used by the unit and the institution

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

Program Response: (5.2.1, 5.2.2 and 5.2.3)

UPC has established Academic Quality Policy and Objectives at institutional level,²²¹ with which all stakeholders must comply. Therefore, in order to continuously evaluate compliance and the results obtained, and to implement improvement actions, the University has designed a strategic objective indicator system based on its academic quality objectives, as stated in its policy.

Said indicators are incorporated in all UPC programs' strategic plans, including the School of Architecture's Strategic Plan, developed for the 2019-2021 period (See Appendix 5.5²²²), which is reviewed by the program Director and Dean on a yearly basis so as to evaluate the results obtained for each indicator²²³ based on the goals established for that particular year, the efficacy of the actions implemented, and any adjustment proposal based on said review and analysis, under an academic excellence approach.

²²¹ Appendix 5.4: Academic Quality Policy and Objectives (SICA-PYO-01)

²²² Appendix 5.5: 2019-2021 Architecture Strategic Plan

²²³ Appendix 5.6: Architecture 2019-2021 Strategic Plan Indicator Dashboard

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At present, the 2022-2024 School of Architecture Strategic Plan is being drafted upon completion of the 2021 annual review. Said Strategic Plan has been improved by incorporating NAAB objectives in the established strategic indicators, which are aligned with the requirements to meet the accreditation (Shared Values, PC and SC). For further information, see Appendix 5.7²²⁴.

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

Program Response: With respect to the strengths, challenges and opportunities identified by the School of Architecture with regard to the program, it is worth mentioning the following aspects:

- A curriculum that includes and articulates a line of Architectural Design Workshops taught from the first to the tenth term of the program.
- Tailored teaching in architectural design, drawing and construction workshops, with a maximum standard of 12 students per faculty member.
- All students of the program are provided with practical teaching in the construction labs.
- Academic agreements and international academic missions.
- Faculty quality as a result of their professional experience and academic degrees. Architectural Design Workshop Tour, which aims at validating a balanced, flexible and comprehensive training. It consists of an exhibition of the final projects of the program's design workshops developed throughout the term, before the Dean of the School, the Program Director, and the faculty members of the course, for discussion and review purposes.
- Academic requirement and recognized prestige of the University and the School.
- WSCUC international institutional accreditation and international programmatic accreditation process with NAAB.
- 2020 was a challenging year, as the Peruvian government established a national mandatory lockdown. In this context, UPC's robust technological infrastructure, welltrained faculty in terms of digital competencies, and the willingness of its staff and executive management to face the new challenges posed by the COVID-19 pandemic allowed UPC to transfer its processes to the online modality in order to fulfill its mission, thus enabling its students to continue studying and moving forward in their degree program.

Among the main challenges faced by the School, it is worth mentioning:

- The growth rate of the School could exceed the number of faculty in the country in line with the profile required by the School of Architecture.
- To increase the participation of faculty members and students in research and publication of papers.
- To improve graduation results (completion within 100% and 150%), addressing actions that contribute to increase the number of students who graduate in the expected time frame.

5.2.5 Ongoing outside input from others, including practitioners.

Program Response: UPC's Educational Model includes a specific approach focusing on stakeholder engagement. This strategy implies stakeholder engagement in almost all the University's processes throughout the educational value chain.

²²⁴ Appendix 5.7: Architecture 2022-2024 Strategic Plan Indicator Dashboard



UPC frequently fosters said engagement and strengthens its culture and best practices of mission-driven reflection and academic freedom. UPC promotes strategic stakeholders' participation in the evaluation of institutional effectiveness and the identification and implementation of improvement actions. Input from primary stakeholders is continuously collected and incorporated into the decision-making process at all levels.

All academic programs have developed a Map of Stakeholders. Based on the latter, the programs have set up an Academic Advisory Committee made up of industry leaders, renowned professionals, alumni, and/or employers. The committees meet at least once every year in order to review the program's strategic plan, to review the program's curriculum and learning outcomes, and to discuss the future of the job market, as well as other topics deemed relevant for the program that will contribute to the program's improvement. For further details with regard to the School of Architecture's Advisory Committee, see Appendix 5.3²²⁵.

In addition, the School of Architecture receives frequent input regarding the program and its activities from the following stakeholders, see Table 5.1:

Stakeholders	Current Stakeholders' Participation
Students	Through direct contact with faculty members (FTFs)
	and class delegates.
Faculty	Coordination meetings.
Advisory Committee	In meetings with the School authorities (Dean and Program Director).
Other areas within the University	In meetings with members of the value chain.
Other programs and schools within the	To establish communication channels with schools in order to find a common ground and opportunities for
University.	joint projects.
Graduates	In meetings with members of the School in general, if any.
Employers	In meetings with members of the School in general, if any.
Professional	Within the framework of calls for professional
Associations	certification.
Other universities	Exchange and professional development projects for students and faculty members. Curriculum articulation.

Table 5.1: Current stakeholders of the School of Architecture

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

Program Response: UPC's Integrated Academic Quality System (SICA) has been designed to ensure and contribute to the fulfillment of the University's mission and vision based on the expectations identified by its stakeholders, academic philosophy and pedagogical principles, as defined in UPC's Educational Model (Link) and the high quality standards defined by the University. SICA has developed a Process Management Map based on the process approach principle. Said map displays three types of macro processes: (a) continuous improvement processes, (b) value chain processes, and (c) enabling processes. Figure 5.1 shows UPC's process management map.

²²⁵ Appendix 5.3: School of Architecture Committees - Academic Advisory Committee (pp. 5-6)

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Figure 5.1. SICA Process Map

The SICA processes, as shown in the process map, are regulated by norm as per the ISO 9001:2015 guidelines and define the various responsibilities and authorities within the Integrated Quality System. This documentation is available to all UPC staff and third parties on the Integrated Quality System website (<u>link</u>).

In order to ensure continuity of UPC's Integrated Quality System, the continuous improvement macro-processes include: (a) planning and improvement and (b) monitoring and follow-up. Monitoring and follow-up allow for data collection for decision-making and implementation of improvement actions, as described below:

a. <u>Assessment Process</u>: UPC, in line with its commitment to academic excellence, has developed an institutional curricular assessment plan that establishes guidelines and processes so as to evaluate the level of achievement of learning outcomes developed by students. The assessment culture is defined as the organizational environment where decisions are made based on facts, research and analysis of relevant information so as to identify opportunities for improvement that maximize the learning outcomes developed by students. The assessment process²²⁶ is shown in Figure 5.2.

²²⁶ Appendix 5.8: Assessment Process (VRA-P-04)

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Figure 5.2. Assessment Process

UPC's assessment process involves faculty members, students, academic directors and administrative staff. The Educational Quality department, through its Curricular Development and Assessment area, in collaboration with a Committee of Experts, is responsible for the assessment of institutional and program learning outcomes. More details on the process are presented below in section 5.3 Curricular Development.

b. <u>Program Review</u>: The Program Review²²⁷ process seeks to evaluate the results of a program taking into consideration the following aspects: strategic management, student and graduate results, faculty management, curricular management and research results. This process is broken down as follows: planning, self-study, peer evaluation, implementation of improvement plans, and evaluation of results (see Figure 5.3).





This process reflects the University and its programs' strong and lasting commitment to continuous improvement. The University's faculty leads the program review process. A team of peer evaluators is selected from the best programs around the world, which provides an independent and experienced view on the program so as to develop an improvement plan to be incorporated into the program's strategic plan.

²²⁷ Appendix 5.9: Program Review Handbook (VRA-M-01)



The self-study is led by the Program Director with the participation of faculty members and external evaluators, allowing the program to analyze the performance of its processes, identify opportunities for improvement, define action plans aligned to the latter, receive feedback from a team of external academic peers, and incorporate it into its improvement plan. The Program Review - Architecture Improvement Plan is attached in Appendix 5.10.²²⁸

c. <u>360° Evaluation</u>: The 360° Evaluation process is an annual evaluation that measures the comprehensive performance of faculty members in each of UPC's academic programs. It includes five dimensions: student evaluation, Program Director's report, internal training, compliance with regulations, and faculty self-evaluation.

The results are published once a year and are reported to the Program Director, the Department of Educational Quality, and the Department of Process Design and Implementation so as to take appropriate corrective actions.

d. <u>Internal Audits</u>: Processes are systematically and independently analyzed so as to determine if the activities of the quality management system comply with the established procedures and if they are implemented in an efficient manner.

The results show the performance and compliance with the regulations and policies established in the University's Integrated Academic Quality System (SICA).

Every year, at least one internal audit is conducted by UPC's certified internal auditors, and one external audit is conducted by Lloyd's Register Quality Assurance (LRQA).

e. <u>Self-Assessment Processes for Accreditation Purposes</u>: Finally, the self-evaluation processes carried out within the framework of institutional and programmatic accreditation procedures contribute to performance evaluations based on high quality international standards.

5.3 Curricular Development

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

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

Program Response: UPC's assessment process (See Appendix 5.8)²²⁹ is geared towards the evaluation of the students' learning and performance, and it involves faculty members, students, academic directors, and administrative staff.

UPC has developed two types of assessment:

- The Jury assessment, in which an Assessment Committee, made up of qualified faculty members who do not teach the course, evaluates the evidence with regard to the students' learning outcome based on a rubric.
- <u>One-on-One Assessment</u>: Said assessment is performed per school in order to measure the level of achievement of the learning outcomes developed by students, by grading an activity scheduled during the course. The faculty members of the course evaluate and rate the evidence produced by each student based on an activity rubric focusing on a specific learning outcome. (Appendix 5.11²³⁰)

²²⁸ Appendix 5.10: Program Review - Architecture Improvement Plan

²²⁹ Appendix 5.8: Assessment Process (VRA-P-04)

²³⁰ Appendix 5.11: Assessment One-on-One Faculty Guide

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The Educational Quality department, through the Curricular Development and Assessment area and a Committee of Experts, is responsible for the evaluation of the Institutional Learning Outcomes at the institutional level. The evaluation of the Program Learning Outcomes is led by each program's Assessment Committee (See Appendix 5.3)²³¹, with the support of the Educational Quality department.

UPC's assessment process is reflected in the course grades and evaluates the level of achievement of each outcome in the courses identified in each curriculum. To this end, the course syllabus provides students with the rubrics²³² to be used to evaluate them in an objective manner.

This is a differentiating factor, as UPC has embraced the competency-based learning model applied by some institutions in America. UPC's model requires students to achieve level 3 (Undergraduate) and level 4 (Graduate) of each learning outcome upon completion of the program. UPC's model is not mastery-based. The latter allows UPC to implement a series courses to guarantee the acquisition of learning outcomes and to identify improvement actions in a prompt manner.

The definitions of the rubrics, methods, instruments, evidence, and size of the sample are determined by the Committee of Experts, for both the Institutional and Program Learning Outcomes. Each program defines the evidence best suited to evaluate the students' performance. These may include capstone, thesis or research courses, portfolio review, final projects, final exams, and internships, among others.

The results of the assessments are analyzed and reviewed in committees such as the Program Assessment Committee²³³, the Program Faculty Committee²³⁴ and the UPC's Academic Committee²³⁵. As a result of this analysis, improvement plans are developed at the institutional and program level. Each program, at the end of the year, must report on the results of the level of achievement of the Program Learning Outcomes in their strategic plan (See Appendix 5.5)²³⁶ and incorporate the latter in the goals of the following year.

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

Program Response: Regarding the Program Criteria (PC) and Student Criteria (SC), the School of Architecture decided to integrate them into the dimensions of the Program Learning Outcomes developed in the Architecture program and to evaluate specific rubrics were developed:

- Grounded design (See rubric attached in Appendix 5.14²³⁷)
- Technique and Construction (See rubric attached in Appendix 5.15²³⁸)
- Architectural Culture (See rubric attached in Appendix 5.16²³⁹)
- Professional Management (See rubric attached in Appendix 5.17²⁴⁰)

Consequently, the evaluation of SC and PC has been incorporated into the program's continuous evaluation process. The correlation between PC and SC, the Program Learning

²³¹ Appendix 5.3: School of Architecture Committees - Assessment Committee (p. 7)

²³² Appendix 5.12: Rubrics of UPC's Institutional Learning Outcomes.

²³³ Appendix 5.3: School of Architecture Committees - Program Assessment Committee (p. 7)

²³⁴ Appendix 5.3: School of Architecture Committees - Program Faculty Committee (p. 9)

²³⁵ Appendix 5.13: UPC's Academic Committee

²³⁶ Appendix 5.5: 2019-2021 Architecture Strategic Plan

²³⁷ Appendix 5.14: Rubric Grounded design

²³⁸ Appendix 5.15: Rubric Technique and Construction

²³⁹ Appendix 5.16: Rubric Architectural Culture

²⁴⁰ Appendix 5.17: Rubric Professional Management



Outcomes and the courses/activities in which they are evaluated are shown in Appendix 5.18²⁴¹.

The evaluation of the SC and PC validation courses is carried out by means of the One-on-One Assessment.

Said assessment is performed in each school in order to measure the level of achievement of the learning outcomes developed by students, by grading an activity scheduled during the course. The faculty members of the course evaluate and rate the evidence produced by each student based on an activity rubric focusing on a specific learning outcome. (Appendix 5.11²⁴²)

"Control and verification courses" are identified in the programs' curricular articulation map and allow the programs to monitor the progress made in terms of the learning outcomes developed by students and to compare the students' performance with the expected level in some specific verification courses. This structure combines both formative and summative assessment approaches that allow identifying improvement areas within the program.

The SC and PC Assessment Results Report for 2021-1 and 2021-2 is attached in Appendix 5.19. $^{\rm 243}$

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

Program Response: Table 5.2 below identifies all the parties involved in the curricular evaluation process of the Architecture program.

Participants	Roles and Responsibilities.		
Program Director	Responsible for the process. Must ensure adequate		
Full-Time Faculty	Responsible for conducting the assessment process. Updating syllabi.		
	and ensuring compliance with the specified schedule. Coordinating the collection of appropriate evidence and preparation of the evaluation report.		
Full and Part-Time Faculty	Members of the Committee of Experts-Rubric Develop, calibrate and validate the rubric to measure the program learning outcomes. Members of the Evaluation Committee.		
Faculty Members.	Participation in results analysis meetings		
Students and Alumni	Based on the results obtained, they propose the necessary changes to improve the results and draw up an action plan.		

Table 5.2 - Participants in the Curricular Evaluation Process

In addition, the School of Architecture has established the following committees involved in the analysis, evaluation and continuous improvement of the program, as detailed in Table 5.3:²⁴⁴

²⁴¹ Appendix 5.18: PC&SC, PLO and Courses/Activities Integration Matrix

²⁴² Appendix 5.11: Assessment One-on-One Faculty Guide

²⁴³ Appendix 5.19: PC&SC 2021 Assessment Results Report

²⁴⁴ Appendix 5.3: School of Architecture Committees
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Table 5.3: School of	Architecture	Committees
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Committee	Objective
Architecture Program's Evaluation and Curricular Change Committee	Develops curricular updating proposals aligned with the expectations and needs of the labor market and interest groups, as defined by the academic program, UPC's mission and Educational Model, and the Peruvian University Law in force.
Architecture Program's Advisory Committee	Provides support, advice and consultancy to the academic program authorities. Periodically reviews the program's mission, curriculum, program learning outcomes, graduate profile, and educational objectives to ensure their validity and relevance, as well as their alignment with UPC's mission, vision and values. Issues recommendations regarding matters related to the training provided to students of the program and faculty initiatives.
Program Review Committee	Leads and manages the Program Review process of the program.
Architecture Program's Accreditation Committee	Plans, directs and actively participates in the development of the self-evaluation process for accreditation purposes.
Architecture Program's Assessment Committee	Analyzes, discusses, plans and implements all actions related to the assessment processes of both institutional and program learning outcomes.
Architecture Program's Faculty Committee	Analyzes the results of the main academic indicators of the program and proposes actions aimed at the continuous improvement of teaching-learning results.

5.4 Human Resources and Human Resource Development

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

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

Program Response: UPC's School of Architecture ensures that faculty members are in sufficient number through its annual budgeting process, wherein the School Director includes new staffing needs for the following year based on expected program enrollments, course-opening requirements, and faculty workload, which includes activities such as: Curriculum, syllabi and course content development, active participation in program review and assessment processes, teaching, dissertation committees, tutoring and advisory activities, and research advisory sessions, among others.

To ensure adequate development of faculty responsibilities in line with the student-centered teaching-learning process, as defined in its Educational Model, UPC has established a framework of action defined by a series of policies, regulations, procedures and performance standards that allow faculty to strike an adequate balance in order to perform their duties in the teaching process and to enhance the students' performance.



In this sense, the provisions on institutional workload applicable to full and part-time faculty of the School of Architecture include:

- Full-Time faculty (FTF): Faculty members with teaching and administrative load that does not exceed 40 hours per week. Faculty members with only teaching load that does not exceed 30 hours per week. See FTF resumes attached in Appendix 5.20²⁴⁵.
- Part-Time Faculty: Faculty members who teach and participate in academic coordination activities. Their workload must not exceed 23 hours per week.

Educational Effectiveness is evaluated through different processes, which include: Assessment, program review, faculty evaluation, student performance evaluation, student's internship results, employability results, and employers evaluation. Said processes are standardized through UPC's Quality Assurance System (SICA) and are conducted by the Institutional Research and Effectiveness department with the support of faculty members.

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

Program Response: As of August 2021, Arch. John Hertz was appointed Architect Licensing Advisor (ALA) of the School of Architecture. His CV is attached in Appendix 5.21²⁴⁶. He was also registered as ALA in the NCARB, as shown in Appendix 5.22²⁴⁷.

Therefore, as of 2021-2, in a joint effort with UPC's ALA, a series of mandatory advisory sessions was conducted among the students of the Workshop X - Thesis Workshop (AR304) in which the topic of Licensing Requirements in the United States was discussed, as shown in Table 5.4 below:

Week	Discussion with group 1 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates;
10/25/2021	Continuous Education.
Week	Discussion with group 2 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates;
11/01/2021	Continuous Education.
Week	Discussion with group 3 of Workshop X - Thesis Workshop.
commencing	NAAB criteria; NCARB AXP; NCAEB SON; NCARB Pass Rates;
11/08/2021	Continuous Education.

Table 5.4: U.S. Licensing Advisory Sessions

Students may also seek support to the course coordinator and UPC's ALA so as to solve any questions or doubts that may arise.

In addition, the School has organized a training workshop focusing on the regulations in architecture in the United States, led by Arch. John Hertz (ALA) for all faculty members of Workshop IX - Professional Practice Workshop (AR302). The training workshop will be conducted on a recurring basis during the first half of the academic term as shown in Table 5.5 below:

Table 5.5

²⁴⁵ Appendix 5.20: FTF Resumes

²⁴⁶ Appendix 5.21: CV - John Hertz (ALA)

²⁴⁷ Appendix 5.22: NCARB registration email of UPC-ALA

Schedule of the Faculty Training Workshop						
Week / Term	Topics					
1	AXP, IBC, IEEC, ADA, Zoning, IBC Ch. 1-3					
2	IBC Ch. 4-5, Studio Project					
3	IBC Ch. 6-7					
4	IBC Ch. 8-10					
5	IECC					
6	IECC					
8	ADA, Zoning,					

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

Program Response: UPC is an organization that learns, disseminates and applies the knowledge acquired, and fosters the staff and faculty's personal and professional development in order to contribute to the institution's mission and vision. In this line, the institution promotes and manages training opportunities to be developed both internally and externally.

External training opportunities refer to courses or programs held outside UPC's facilities and are directly related to improving their professional development. For instance, the Universidad Andrés Bello of Chile offers a Master's degree in Teaching for Higher Education with a 25% discount on the tuition fee for UPC faculty members. To date, 11 faculty members of the Architecture program have completed the Master's degree program.

Internal training opportunities include a wide range of professional development possibilities. The latter ranges from participation in conferences, workshops and courses to access to the academic offer at UPC's Graduate School, continuous education courses, specialized programs, and even masters, with scholarships that cover up to 75% of the program value, on top of specific payment arrangements.

The internal training process of faculty members is conducted by the Teaching Development and Management area of UPC's Educational Quality department. This process aims to develop the competencies of UPC's academic staff:

- Pedagogical competency (being a professor): The ability to design and teach class sessions, and evaluate learning outcomes.
- Personal competency (being a person): The ability to create a teaching-learning culture based on respect, communication, teamwork, and democracy.
- Innovation competency (being innovative): The ability to integrate creatively and appropriately technological tools and versatile materials to achieve the learning outcome.
- Managerial competency (being a manager): The ability to plan and manage the learning process, taking into consideration information management.

In this sense, a faculty training curriculum has been designed in order to develop and strengthen the aforementioned faculty competencies through the acquisition of tools, strategies and methodologies. The 2021 faculty training curriculum is attached in Appendix 5.23²⁴⁸.

All faculty members who teach in undergraduate programs are responsible for completing a minimum of 20 hours of internal and/or external training per year. Internal and external training related to the faculty members' field of specialty (professional training) are taken into account in

²⁴⁸ Appendix 5.23: 2021 Faculty Training Curriculum



the evaluation carried out by the Program or Area Director as part of the Faculty Performance Evaluation (360° Evaluation).

The 2021 Faculty Handbook is attached in Appendix 5.24²⁴⁹.

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

Program Response: UPC students are provided with the following support services:

- <u>First Year Psycho-Pedagogical Assessment</u> This assessment provides guidance to new students and aims to identify each student's level in the following areas:
 - Learning Strategies: evaluates intrinsic orientation, task evaluation, self-efficacy conviction, organizational strategies, cognitive strategies, and achievement motivation.
 - Vocation: evaluates self-confidence in decision-making, environmental control, behavior related to the selected program.
 - Anxiety towards Evaluations: assesses worry and anxiety towards exams.
 - Well-Being: assesses engagement. The latter refers to a psychological state expressed through a feeling of well-being towards a specific academic challenge related to studies, which mainly implies a strong commitment towards one's duty as a student and an intrinsic desire to contribute something valuable to the student.

This assessment allows students to identify their strengths and weaknesses at the beginning of their university life. In addition, if any weakness has been identified, students are provided with the support of UPC's academic advisory and psycho-pedagogical counseling services.

<u>Academic Advisory Sessions:</u> The sessions aim to provide students, especially students at academic risk, with the necessary support to adjust to university life. UPC has set up a team of academic advisors, who are full-time faculty members of the Architecture program, and who provide said services in UPC's sites (Monterrico, Villa and San Miguel). The academic advisors identify the students' risk level based on the following criteria: the initial target test (to be taken by incoming students), the results of their first term, students who have already been at academic risk in the previous term, and students who request academic advisory sessions.

During the first three weeks of the term, the academic advisors make first contact with the potentially at-risk or at-risk students in order to establish a plan or follow an existing plan. During the pedagogical advisory sessions, the advisors and students set two to five personal and academic goals for the term and establish a weekly calendar so as to track the implementation of the plan.

Depending on the needs of each student, the academic advisors will refer the students to one or more support services such as tutoring (Humanities and Sciences), co-curricular psycho-pedagogical orientation workshops and individual orientation workshops (psychological and emotional counseling provided by the Psycho-Pedagogical Orientation area). These support services will be explained in detail below.

The Educational Quality department, through its Psycho-Pedagogical Orientation area, provides the following services to provide support to students in terms of academic progress and well-being:

²⁴⁹ Appendix 5.24: 2021 Faculty Handbook

N.¹.B

- <u>Risk Counseling.</u> The objective of the program is to guide and advise students at academic risk in order to evaluate their academic status and make decisions to overcome the latter, in the case of risk of academic failure. Therefore, the academic risk advisors provide students with guidelines for a self-diagnosis of the reasons for academic risk and propose strategies to overcome them.
- <u>Vocational counseling</u>. Vocational counseling seeks to assess the aptitudes, personality traits and vocational interests of college students who seek counseling.
- <u>Study and Learning Strategies Workshop.</u> These workshops are designed to provide study and learning strategies and techniques upon identification of the students' needs. To this end, an interview and psychological tests on study habits and learning styles are conducted.
- <u>Personal Development Workshop.</u> This workshop seeks to provide a group space to develop socio-emotional competencies, such as emotional intelligence, social skills, teamwork strategies, assertive conflict resolution, emotional management, and family and couple conflict management. The development of these competencies contributes to the students' overall well-being, including their personal and professional development.
- <u>Diversity and Inclusion Program.</u> This program seeks to promote the adequate adaptation and insertion process of students with disabilities who wish to attend a university program.
- <u>Psychological Counseling.</u> Psychological counseling refers to dialogue and interaction, both in a dynamic and confidential manner. It is practiced by psychologists who, through a personal and direct relationship, seek to provide undergraduate students with socioemotional support to ensure their overall well-being.
- <u>University Coaching for Incoming Students Coming to Lima from Other Cities or Abroad.</u> This program seeks to strengthen the personal resources required for students to make the most of UPC's Educational Model and, therefore, adjust to the university environment and the lifestyle of the city of Lima. Students are provided with advice and guidance during their adjustment process by junior or senior students from their program (also known as student coaches). In addition, the program allows them to be part of a network of supportive students, with whom they share similar characteristics.
- <u>Mágica Project.</u> Faced with challenges posed by the COVID-19 pandemic and the need to
 provide emotional support to UPC's academic community so as to cope with the health
 emergency, as well as the mandatory confinement measures, the University has
 implemented the Mágica project offering a space for listening and emotional well-being.

The Mágica project is led by psychologists from the Educational Quality department and is available to UPC students, faculty members and collaborators through two channels. Infographics and graphic pieces that were shared through UPC's official channels, and communication channels that allow requesting a space for containment and support in a timely manner.

Firstly, interventions focus on the prevention of grave psychological distress. The latter is geared towards specific circumstances in which the population is exposed when performing their duties as part of UPC's academic community and when they feel socially isolated. Some topics that have been incorporated in the intervention include anxiety management, healthy daily routines, sleep hygiene, depression, coexistence, time management, and conflict management.

N.¹.B

Secondly, interventions focus on emotional support that provide brief and focused counseling to UPC's collaborators and their family members who request it. Due to the high demand, two intervention modalities were identified and implemented, both designed to provide a space for listening and brief counseling of 20 to 30 minutes per person, and counseling of up to 50 minutes per person focusing on a specific topic during each session. In view of the impact of the pandemic at national level, this project will remain active at UPC for the duration of the health emergency. It will then be evaluated to decide if new projects should be implemented.

• <u>Job Placement Support Service.</u> The Career Services department plays a strategic role as a facilitator between the labor market and UPC students and alumni. It is responsible for the administration and management of UPC's job fair, the University's online employability platform, which provides access to different companies and institutions that wish to contact UPC students and alumni. In this case, they must submit offers to be evaluated by the department in order to validate their integrity, after which they are uploaded onto UPC's platform for student and alumni to access them, as the case may be.

In terms of internal role and consistency with regard to its responsibility as a facilitator of the labor market, the Career Services department provides guidance to UPC students in their search for internships and support to alumni in the tough and competitive process of job placement in the labor market.

UPC's Science and Humanities departments offer students the opportunity to participate in tutorials and seminars to reinforce and complement what they have learned in class:

- <u>Language Tutoring</u>: Academic advisory sessions provided by the University to students in its four campuses/sites in order to reinforce what has been learned in class. These advisory sessions are supervised by a team of faculty members with specialized training in different areas of the Language courses: Remedial Language, Language Comprehension and Production I, Language Comprehension and Production II and Communication.
- <u>Language Seminars:</u> Seminars that allow students to review and reinforce their knowledge on topics taught in the undergraduate language courses: Remedial Language, Language Comprehension and Production I, Language Comprehension and Production II and Communication. Seminar attendance is free of charge. The courses follow a schedule, which is posted in each section of the Virtual Classroom.
- <u>Science Tutoring:</u> Tutoring that complements the theoretical and practical classes. The tutoring focuses on the cognitive aspects related to the learning outcomes of the course so as to solve any doubts on topics related to the Science courses, such as: statistics, physics, mathematics and chemistry. As a result of the tutoring, students reinforce the development of the institutional learning outcome of Quantitative Reasoning. Tutoring can be individual or in groups (up to 3 students).
- <u>Language Tutoring</u>: Academic advisory sessions provided by the University to students in its four campuses/sites in order to reinforce what has been learned in class. These advisory sessions are supervised by a team of faculty members with specialized training in different areas of the Language courses: Language Remedial, Language Comprehension and Production 1, Language Comprehension and Production 2, and Communication.
- <u>Language Seminars:</u> Seminars that allow students to review and reinforce their knowledge on topics taught in the undergraduate language courses: Remedial Language, Language Comprehension and Production I, Language Comprehension and Production II and Communication. Seminar attendance is free of charge. The subjects follow a schedule, which is published in each section of the virtual classroom.



The School of Architecture also offers <u>Architecture Support Workshops - "Senda"</u>: This workshop is available to all students of the architecture workshops, at all levels (one workshop per level). The purpose of the workshop is for students to reinforce their skills by combining the different learning outcomes required according to the level of each architecture workshop so as to improve their architectural project. Students are able to make queries on both the formal aspects of architecture in its design, as well as the normative and functional aspects, in addition to other factors (sustainability, context and technology, among others) where doubts about their application may arise, therefore fostering the search for multiple solutions and increasing the project experience. See Appendix 5.25²⁵⁰.

Drawing workshop, which focuses on the following courses: Introduction to Sketching, Artistic and Spatial Expression and Architectural Drawing

This workshop includes individual exercises related to projects worked on in class. Students are able to level up with their peers in the courses they take. It aims to support students who need to improve their knowledge and skills in terms of drawing, control of artistic and spatial expression, and the use of architectural drawing tools. In addition, each week, the workshop aims to help students with the topics they have reviewed throughout the term, and to solve practical exercises in order to clarify any doubts that may arise and prepare them for the final evaluation of each course.

Digital Workshop, which focuses on the following software: SKetchup, Revit, Rhino, 3DMax and grasshopper

The main objective of the digital workshops is to reinforce the students' skills when using the different commands and applications that imply the optimal use of software not only in terms of the mastery of the programs but also as tools that are useful within the framework of the design workshops. Emphasis is put on the adequate three-dimensional representation of architectural projects, taking into consideration modeling, materials, lighting and ambience, among others. Students are able to select the program of their choice and solve any doubts in each session. The workshops are organized according to the students' queries and the projects they are developing.

Modeling Workshop

The modeling workshop allows students to make queries regarding the contents of the courses and the criteria to be taken into consideration for the structural pre-dimensioning of their projects. Likewise, the workshop also strengthens different construction technologies to be applied in architecture, as well as the technical norms to be taken into consideration within the framework of the construction process of structural systems.

Architectural Presentation Workshop

This workshop uses the students' previous experiences to reflect on the different ways of presenting the architectural object according with emphasis on what is to be communicated to the target audience. The workshop allows students to reinforce the use of color palette, format selection (paper size), typography, as well as other essential concepts such as the size of the elements, their position, quantity and final appearance, taking into consideration the visual impact and the communication strategy. The workshop also allows students to visualize printed and digital formats such as books, articles and panels, among others.

²⁵⁰ Appendix 5.25: 2021 Architecture Support Workshops Senda

5.5 Social Equity, Diversity, and Inclusion

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

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

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

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

Program Response (5.5.1, 5.5.2 and 5.5.3): UPC has always promoted diversity and its value among UPC constituencies. UPC recognizes that its community is composed of an extremely talented and diverse group of students, faculty, and staff. The diversity of its constituencies is one of the main reasons why UPC has been acknowledged for its contribution to higher education, to the development of the country, and to the creation of new knowledge in Peru.

UPC is committed to creating an environment free of discrimination or any type of harassment based on race, gender, sexual orientation, religion, age, disability, or marital status. The diversity of thought, gender, sexual orientation, race, marital status, nationality, or religion is seen as a pillar that supports the University's fundamental activities. The admission of students, hiring of professors and administrative staff, the recognition of the foregoing groups, and the establishment of any benefit or obligation shall be carried out without any form of bias with regard to the aforementioned characteristics. Refer to UPC Diversity and Non-Discrimination Policy (Link) and Academic Freedom Policy (Link).

The population of Peru is mostly of mixed ethnic background (mestizo, Amerindian, European, Afro-Peruvian, and Asian), and the government does not provide any regulation that grants scholarships or demands minimum quotas of students based on race or ethnicity. However, in accordance with the Political Constitution of Peru, UPC includes in its regulations the prohibition of racial or any other kind of discrimination.

Due to the racial and cultural diversity in Peru, asking about race and ethnicity to a person is considered rude and might imply discrimination based on that information. Consequently, public or private organizations of any sector do not require or publish information on the race or ethnicity of their constituencies.

In regard to statistical information, UPC is institutionally accredited by WASC Senior College and University Commission (WSCUC), and according to the last annual report, our institution provided the following information on diversity that can be referred to in Appendix 5.26²⁵¹, UPC'S Students, Faculty and Staff Diversity Report (2016-2021).

Regarding students at the School of Architecture, statistical information on diversity can be found in Appendix 5.27²⁵².

²⁵¹ Appendix 5.26: UPC'S Students, Faculty and Staff Diversity Report (2016-2021)

²⁵² Appendix 5.27: UPC's School of Architecture Students Diversity Report 2021

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

Program Response: As established in UPC's Diversity and Non-Discrimination Policy (Link) and the Academic freedom Policy (Link), the admission of students, hiring of professors and administrative staff, the recognition of the foregoing groups, and the establishment of any benefit or obligation shall be carried out without any form of bias with regard to the aforementioned characteristics.

In Peru, the government does not provide any regulation that grants scholarships or demands minimum quotas of students based on race or ethnicity. However, in accordance with the Political Constitution of Peru, UPC includes in its regulations the prohibition of racial or any other kind of discrimination.

UPC, committed to diversity and inclusion of its students, faculty and staff, has an Accessibility for Students with Disabilities Policy, the PADI program, and the Health Plan for Employees with disabilities at UPC. Norms and program that are described in 5.5.5 below.

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

Program Response: Universidad Peruana de Ciencias Aplicadas has an Accessibility for Students with Disabilities Policy (<u>link</u>) that aims to ensure equal opportunities for students and the "Diversity and Inclusion Program" (PADI), which provides attention and counseling in the academic and socio-emotional level to ensure the comprehensive welfare and inclusion in the university system of students with some type of disability.

At the beginning of the term, the Program Director is informed of the list of students with disabilities in order to implement the corresponding accessibility measures in favor of these students, the coordinators of the academic areas are informed as well as faculty members, who have the support of specialists of the Educational Quality area to carry out the training they may require in order to provide adequate support to these students.

UPC also has a Health Plan for Employees with Disabilities (Appendix 5.28)²⁵³, this norm aims to establish the guidelines for appropriate work insertion, with equal opportunities for people with disabilities. It also aims to protect the health of employees that due to their condition are especially sensitive to risks derived from their work, by hazard identification, risk assessments and recommendations with the necessary prevention and protection measures.

5.6 Physical Resources

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

5.6.1 Space to support and encourage studio-based learning.

Program Response: Over the years, the Architecture Program has grown significantly at UPC; currently, it is delivered in three of the four UPC campuses:

- Monterrico campus, in the District of Santiago de Surco
- Villa site, in the District of Chorrillos

²⁵³ Appendix 5.28: Health Plan for Employees with Disabilities (SICA-SEG-P-21)



• San Miguel site, in the District of San Miguel

The academic activities and, in general, our teaching and learning culture in the program are applied and developed equally at all campuses. In all of them, we have specialized spaces for architectural design, construction, and mockups for students. In addition to these specialized spaces, UPC facilities offer common services for all programs: Library System, Faculty Lounge, meeting and study spaces, sports and entertainment facilities and cafeterias. See Appendix 5.29²⁵⁴.

Considering the aforementioned, the spaces offered by the program for the development of its academic activities are as follows:

- **Classrooms:** modern and suitable spaces equipped with a board, an Apple TV, a projector, wireless Internet access and all the necessary resources for the good delivery of the class. The spaces comply with the infrastructure and equipment conditions required for the teaching and learning, and the research processes.
- **Computer Labs**: include Dell Precision T1600 computers, an EPSON multimedia projector, a Makerbot 3D digital printer, an HP plotter, an HP scanner, a screen, speakers, a cisco commuter, a DELL P2011H 20 monitor and a white board. Table 5.6 shows the area and capacity of each lab at campus.

Monterrico			Sar	n Migu	el	Villa		
Computer Lab	m2	Capacity	Computer Lab	m2	Capacity	acity Computer m2 Capac		
F23	68.02	15	SB506	58.9	20	VH204	51	20

Table 5.6: Computer labs - area and capacity

• Workshop Classroom (AT): For practical courses of design and drawing, these spaces offer work tables appropriate for these tasks. It also has a board, a computer, an Apple TV, a projector, wireless Internet access and all the necessary resources for the appropriate development of class sessions. Monterrico Campus has 20 ATs, San Miguel 11 ATs and Villa 8 ATs, as detailed in Table 5.7 below.

Monterrico			San	San Miguel			Villa		
Workshop Classroom ARQ	m2	Capacity	Workshop Classroom ARQ	m2	Capacity	Workshop Classroom ARQ	m2	Capacity	
F15	63.48	25	SB304	79.39	28	VA309	77.25	30	
F16	63.48	24	SB701	70.51	30	VA310	78.33	30	
F19	72.80	28	SB702	73.95	26	VG015	95.06	30	
F26	61.99	30	SB710	70.28	26	VG115	95.06	30	
F28	66.87	30	SC311	73.43	30	VH210	80.18	30	
F31	64.35	30	C-412	73.31	30	VH211	80.30	30	
F33	68.58	30	SC513	73.31	30	VH311	80.35	30	
F34	68.53	30	SC604	86.39	30	VH312	80.48	30	

Table 5.7: Workshop Classroom - Areas and capacity

²⁵⁴ Appendix 5.29: UPC Architecture Facility

NAVAB

Мо	nterrico		San	Miguel		V	/illa	
Workshop Classroom ARQ	m2	Capacity	Workshop Classroom ARQ	m2	Capacity	Workshop Classroom ARQ	m2	Capacity
F37	67.45	30	SC612	73.45	30	VH313	76.81	30
F43	62.05	30	SC804	87.55	30	-	-	-
F44	67.38	30	SC803	73.06	30	-	-	-
F45	67.24	28	-	-	-	-	-	-
F47	64.62	30	-	-	-	-	-	-
F48	69.03	28	-	-	-	-	-	-
F55	68.31	27	-	-	-	-	-	-
F56	67.92	28	-	-	-	-	-	-
F58	60.18	30	-	-	-	-	-	-
F59	65.79	27	-	-	-	-	-	-
G22	80.08	30	-	-	-	-	-	-
G53	74.64	30	-	-	-	-	-	-
Total	1,344.77			834.63			743.82	

• **Construction shop labs:** Students are provided with equipped facilities and support personnel they need to learn how to execute work through practice using different materials. These shops, in addition to being work areas, offer warehouses and wash areas, and offices for faculty. They are equipped with work tables and electrical and sanitary systems necessary for the assignments. See table 5.8.

Table 5.8: Workshop Classroom - Areas and capacity

		M	0	SI	N	VI	
		M2	%	M2	%	M2	%
Roofed	Critique room	23.00	4.3	28.00	5.9	28.00	5.4
area	Materials and tools warehouse	20.00	3.8	20.00	4.2	14.00	2.7
Onen	Practice Area 1 (slab with awning)	109.00	20.6	163.00	34.5	90.00	17.3
Open	Practice Area 2 (plot of land)	282.00	53.3	200.00	42.3	305.00	58.5
area	Equipment Warehouse	6.50	1.2	6.50	1.4	6.00	1.2
	Field material warehouse	89.00	16.8	55.00	11.6	78.00	15.0
	TOTAL	529.50	100.0	472.50	100.0	521.00	100.0

• **Mockup shop:** Area where students can work on their projects outside class hours. These spaces offer large work tables for students to work on their individual or group assignments. This area is useful for temporary work of the School's students since most of them live in Lima with their families. See table 5.9.

	Monterrico			San Miguel			Villa		
	Room code	m2	Capacity	Room code	m2	Capacity	Room code	m2	Capacity
Work area for students	N/A	147.6	32	N/A	89	36	N/A	268.3	88
Assistant's office	N/A	13.91	2	N/A	49.5	2	N/A	45.5	12
Warehouse	N/A	22.12	3						

Table 5.9: Mockup Shop - Areas and capacity

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

Program Response: The main campus, Monterrico, has an auditorium and two conference rooms, and Villa and San Miguel sites have an auditorium and a conference room each one. Additionally, all campuses have individual or group cubicles which are managed by the Library System. Table 5.10.

Table 5.10: Auditoriums and Aula Magna - capacity and area.

	Monterrico			San Miguel			Villa		
	Room code	m2	Capacity	Room code	m2	Capacity	Room code	m2	Capacity
Auditorium	A-EBR	156.48	140	N.A.	323.33	325	AUDITORIUM	162	186
Aula Magna 1	UAM- 1	146.7	103	N.A.	138.81	120	VAM01	122	124
Aula Magna 2	UAM-2	146.7	103	I	-	-	-	-	-

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

Program Response: Our faculty has available the following spaces to work on their activities:

- <u>Digital Education Resources Room (RED Room).</u> Every library of the four UPC campuses
 has a Digital Education Resources Room for the exclusive use of UPC's faculty. This room
 is equipped with computers, a printer and a scanner, as well as a space for group work.
 Faculty members receive guidance in terms of searching physical and digital contents, as
 well as guidance on how to prepare class materials and other digital education resources.
- <u>Faculty Lounge</u>. It provides a place to work, read and rest to the UPC's faculty at the four university campuses. Our faculty can find here a service counter, work tables, computers, lockers, meeting room, etc.
- <u>Meeting Rooms</u>. These are spaces where the faculty can work individually or in groups, and hold meetings with students.

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

Program Response: In regard to information resources to support the program pedagogical activities, UPC is aimed at providing students the best learning experience, including digital component, both for the interaction between students and faculty and for the development of learning outcomes.



Since its creation, UPC considered that technology was an important component that must go along with the students' education process to enhance it. The Digital and Online Learning Department (DADO, in Spanish) was created in 2016 to support the strategic dimension of Digital University at UPC. More than just a new department, it was the result of the transformation of the area called Information and Communication Technologies for Education (TICE, in Spanish). The reason for the change at UPC was to deepen the development of strategies to exacerbate the use of technologies to enhance student learning. New student generations are digital natives, willing to take advantage of all the resources available to them. The new office will move from being a tech service office to play a key role in student learning.

DADO's mission is to transform teaching and learning experiences by integrating technologies to complement the development of institutional and program learning outcomes. In terms of vision, it seeks to be a world reference in the design and implementation of innovative digital teaching and learning experiences. For further information see appendix 5.30²⁵⁵

The information resources available at UPC are the following:

- Blackboard Virtual Classroom (BVC): offers the face-to-face classroom in a synchronous way. BVC offers several benefits such as allowing the professor to use a white board, as well as sharing slides, documents, and the computer screen. Likewise, students can participate and interact in class through the chat system or by directly using the microphone. Interaction within students is similar as in a face-to-face environment. Thus, all digital learning takes place in the Blackboard Virtual Classroom, where students have synchronous and asynchronous activities all designed to achieve each course objectives.
- **Socrates:** online platform where students can check academic information, such as academic status, history of grades and schedules, and manage different academic procedures, etc.
- **Mi UPC:** online platform that allows students and tutors to have access to information on schedules, courses, academic terms, grades and reservations in a faster way.
- Office 365: communication and productivity platform available to all students, faculty and staff at the University, which allows them to communicate "any time at any place" and using any kind of device: electronic mail, chat, audio and video conference. All the community can be connected using this platform; additionally, they provide productivity tools and encourage collaborative work.
- **UPC Virtual labs:** this online platform provides students software applications to be used in the courses they are enrolled from any Internet connection outside the UPC network.
- **UPC Remote labs:** this service makes available to students SW applications of the labs at the campuses: Suite Adobe, Sibelius, Matlab, Sabre and Audaces. Students can access them from outside the UPC facilities.
- **Technological Support**: UPC provides technical support service for IT solutions to all students, faculty members and administrative staff. This technical support service is called IT Service. The queries managed by IT Service are related to: Socrates intranet, Mi UPC student portal, Blackboard Virtual Classroom, virtual labs, web contact, office 365 email, mobile apps, etc.

²⁵⁵ Appendix 5.30: Description of Digital and Online Learning Department's functions by area.

NAMB

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

Program Response: When the Peruvian government declared the state of emergency and the mandatory lockdown, UPC was prepared to face the challenge of providing virtual synchronous education. The university robust technological infrastructure (Blackboard), see appendix 5.31²⁵⁶, the well-trained faculty in digital competencies, as required by UPC's faculty educational model and the willingness of all the staff and executive management to face the new challenges imposed by the sanitary emergency, led UPC to prepare all its processes for online delivery to continue with UPC's mission. The university did not just jump into a virtual modality with synchronous classes, UPC reinforced its innovative process to develop appropriate classwork to take advantage of the virtual education.

Students, faculty, and staff have the desire and purpose to go back to college and offer the best service as we are used to. UPC successfully started the 2020-01 academic year as scheduled in the academic calendar for traditional undergraduate classes. It took a week to reassemble all processes, develop a support system for faculty and students, retrain faculty who might need a quick refreshment of the use of virtual classroom, develop tutorials, guarantee connectivity to support access for all students and to redesign some services that were traditionally offered in a face-to-face modality.

A key factor for the success in using a virtual environment, where a portion of the learning process in asynchronous, is the need for companionship, guidance, and support during the autonomous activities proposed in each course. UPC's faculty play a fundamental role in the development of the synchronous part of the course as well as all the autonomous activities that student must perform. Later, UPC implemented at the beginning of 2020 the Online Teaching Assistant (AAD in Spanish), whose purpose is to bring support to students outside class hours, by guiding them in the digital learning environment so that they can successfully complete all asynchronous activities. The AAD closely coordinates with the course professor, to provide support, answer inquiries, guide the development of the weekly activities, and monitor the progress of all their students.

In this context the School of Architecture at UPC would like to share its successful experience in the Studio and Construction Workshop courses during the 2020 pandemic emergency and mandatory lockdown in our country.

Even though our <u>Studio courses</u> have an intense practical experience, the School of Architecture decided to present all Studios online because of the digital revolution as a result of the pandemic.

In the 2020 first term, a support strategy was implemented with the faculty of the School of Architecture. Students of the first terms were provided support and training in the basics of software programs like SketchUp, as well as their professors who also were flexible and allowed students to submit hand-made models as well as 3D digital models while this training took place.

Students of mid-career and above were already trained in CAD mandatory courses: Revit and Rhinoceros, and were able to work with those software programs. However, they also were provided with extra-curricular free training, called SENDA, to solve their doubts in 3D modelling.

As students become more skilled, and their curiosity makes them develop even more abilities, the faculty of the School of Architecture decided to ask students to submit their work using all the visual techniques they know such as infographics, oral presentations, virtual tour videos, etc. Students' work was shared in Blackboard Collaborate allowing the professor and all students in class to

²⁵⁶ Appendix 5.31: Digital Learning Evolution 2020

analyze and provide feedback on each work, resulting in a broadening and significant learning experience.

In regard to <u>Construction Workshop</u> courses, in the 2020 first term (mandatory lockdown was implemented in the whole country) to ensure students a learning experience equivalent to the one carried out in previous terms, the faculty's strategy at the School of Architecture was to teach these workshops with the design of construction models made in SketchUp by professors in each class.

In the 2020 second term, with partial lockdown in the country, the School of Architecture was able to implement a hybrid system: small groups of students with prior authorizations and complying with strict biosafety protocols, were able to attend the construction workshop and participate in the development of a construction module, while other students attended classes through the Blackboard Collaborate Ultra platform, participating remotely and having the opportunity to exchange questions about construction experiences with the workshop participants.

This year, 2022, the Peruvian Government is expected to authorize and release official protocols and regulations to return to regular classes at campus.

5.7 Financial Resources

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

Program Response: UPC is a financially-sound institution whose main source of income is the undergraduate and graduate teaching fees. Its financial results are publicly shared in the Transparency section of UPC web site (<u>Link</u>). The Accounting Department prepares the financial statements annually based on the Generally Accepted Accounting Principles (GAAP), which are then audited by PricewaterhouseCoopers (PwC).

UPC financial management aims at assuring the availability of the financial resources required for the sustainability, development and continuous improvement of its programs. To this end, the University annually prepares the budget and planning process.

The process starts in September of each year, when the program academic director prepares a proposal of the budget required for the following year, by considering the suggestions and needs identified in the meetings held by the Advisory Committee, faculty, administrative staff, and others. This helps identify requirements for operational purposes and new program projects, taking into account strategic initiatives and goals defined in the Strategic Plan.

The program deans and academic directors present and support their budget requirements for the following year before the Rector and Finance Department who, upon approval of the proposal, assign the required resources.

Within this framework, the Architecture Program conducts the annual budget planning process to guarantee the correct coverage of its needs, such as material procurement for the development of courses, payment to faculty providing thesis advisory to students, national and international events and academic activities, and social responsibility activities.

It also considers coverage of construction workshops, which are allocated with a budget that allows to carry out each project.

Regarding the faculty payroll, this budget and payments are managed by the Human Resources Department. And regarding research financial resources, UPC Research Department oversees the institutional budget for research development at the University. Furthermore, this Department provides support and advice to the program's faculty and students and/or graduate students who apply for external grant fund.

Since the Architecture program is delivered in three of the UPC's campuses, Monterrico, Villa and San Miguel, the School of Architecture allocates a percentage of its annual Budget to each campus

considering the projection of students' enrollment per campus. The budget distribution is as shown in table 5.11.

String s/n PER	Campus	Annual % allocated						
		2019	2020	2021	2022			
0300-110010-30	Monterrico	51%	54.60%	48.10%	34.73%			
0310-110010-30	Villa	24% 21.94% 23.90% 22.60%						
0320-110010-30	San Miguel	25%	23.46%	28.00%	25.48%			
9000-110010-30	Corporate ²⁵⁷	N.A N.A N.A 17.19						
	TOTAL	100%	100.00%	100.00%	100.00%			

Table 5.11. School of Architecture's annual budget distribution per campus 2019 -2022

One of the categories with more significant expenses in the Architecture Program is the purchase of materials and tools for practice sessions of the Construction Workshops at the three campuses, Monterrico, Villa and San Miguel. Table 5.12 shows the percentage of the budget allocated that each campus invests in the purchase of material and tools for the Construction Workshops.

		Expenses distribution: Construction Workshop (TC) vs. others										
Campus / Site	% expenses TC Other expenses		% expenses TC Other expenses		% expenses TC	Other expenses	% expenses TC	Other expenses				
	2019		2020		2021		2022					
Monterrico	58.77%	41.23%	45.00%	55.00%	51.00%	49.00%	86.57%	13.43%				
Villa	63.85%	36.15%	65.00%	35.00%	67.00%	33.00%	90.13%	9.87%				
San Miguel	63.83%	36.17%	62.00%	38.00%	70.00%	30.00%	90.04%	9.96%				

 Table 5.12.
 Architecture Program - Budget for Construction Workshops/Campus 2019-2022

Scholarship and Credit Services

UPC has a complete scholarship program that offers partial or full financing alternatives to help students to pay for their studies, including outstanding and low income students, after evaluation of each particular case. Through UPC website -Scholarships, Credits and Collections Section-(Link), information is disseminated about scholarship services, credits and reclassifications.

- **UPC Help:** Space implemented for the support and guidance on financial issues to our students during the pandemic (Link Undergraduate, Link Graduate). This space is used to communicate the different options for payment, the changes of some conditions to be able to access socioeconomic scholarships, with the objective of making some terms more flexible to support students with economic problems resulting from the health emergency.
- Scholarship Program: The types of scholarships that UPC offers to its students are below:
 - o Honors Scholarship
 - Laureate Academic Excellence Scholarship
 - o Laureate Sports Scholarship UPC Outstanding Athletes
 - Socioeconomic Scholarship

²⁵⁷ Note: ACSA membership and other accreditation expenses.

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 Scholarship under Law No. 23585 (applicable to students with family economic needs due to loss or permanent disability of the parent or legal tutor).

For further information see appendix 5.32²⁵⁸.

- **Reclassification Program:** Additionally, UPC offers the option for the reclassification of the payment scale for students, upon socioeconomic evaluation of each case. The types of available reclassifications are as follows:
 - Socioeconomic Reclassification
 - Regular reclassification (that is, to place students in payment scales according to their economic situation)
 - Reclassification based on Sibling or Parent
- PRONABEC: The Public Scholarship Program (PRONABEC) offers educational credit as a
 personal loan to Peruvian students and professionals in order to finance their Undergraduate
 and Graduate Studies, partially or totally, in the country or abroad, at an accessible rate of 4 %
 per year. PRONABEC education credit is applicable to all programs and as of the beginning of
 studies. For further information see appendix 5.33²⁵⁹

5.8 Information Resources

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

Program Response: The Architecture Program uses the UPC's Library System according to the needs of students and faculty. This system is managed through an update and continuous improvement program.

The UPC's Knowledge Management Department (KMD) belongs to the Vice-Rectorate for Academic Affairs and Research (VRAI) and is responsible for managing the academic knowledge of the university community, having as mission: "To involve UPC's university community in the process of knowledge generation, its systematic registration and access, dissemination and use of such knowledge". A detailed report on the Knowledge Management Department is included in Appendix 5.34²⁶⁰.

The KMD is responsible for:

• The Library System, that consists of the functional areas of Teaching and Learning Resources, Services User Experience, and the Libraries. Through this system, the KMD manages the collections and services that support the academic and research process of students, faculty and graduates.

The mission of the UPC's Library System is: "to provide services, resources and experiences that enhance student learning and success, inspire creative expression, enable the generation of new knowledge, and facilitate informed dialog".

- The Academic Production Support area is formed by the functional units of the Case Study Center, the Academic Repository, the Journal Portal, the Reprographic and Digitalization Services, and the Academic Integrity Service (Turnitin).
- UPC's Publishing House seeks to publish the knowledge generated by UPC's academic community through different formats.
- The functional unit of Platform Support and Digital Resources.

Since its creation in September 1994, the UPC's Library was conceived as a Resource Center for Learning and Research (RCLR), a space not only for acquiring knowledge, but also for creating

²⁵⁸ Appendix 5.32: UPC Scholarships and Discounts

²⁵⁹ Appendix 5.33: PRONABEC Scholarships Programs

²⁶⁰ Appendix 5.34: Knowledge Management Department UPC 2021 Report

knowledge. It was the first Peruvian university library to provide direct access to its books through the open-shelf system and the self-service book loan method. In addition, in 2007, it was the first Peruvian library to participate as a member in a global collaboration initiative among libraries, called OCLC (Online Computing Library Center), based in Dublin, Ohio (USA). Since March 2010, it is also the first university library in the country to provide a tablet loan service for students and faculty.

About iPad loans²⁶¹, in 2020, due to the sanitary emergency, the loan term for iPads was extended, from one day to the whole term and at home for students and faculty that do not have a device for virtual classes. Additionally, for the return of these devices, counters were set at the gate of the Monterrico, Villa and San Miguel sites, so that students from any of the campuses can come to return them.

Currently, the UPC Library has a matrix structure, with a corporate team and libraries at the different campuses. The corporate team is made up of the functional units of Teaching and Learning Resources, and Service User Experience. This team also supports the development of the Information Literacy learning outcome for faculty and students, as well as the design and implementation of knowledge generation activities for the university community. The libraries provide access to the learning support infrastructure (cubicles, reading rooms, computers, iPads, among others) and to the collection of physical books and special materials that complement the extensive digital collection of books and journals subscribed by the UPC Library.

The library system has a robust digital ecosystem that allows it to be at the technological forefront in terms of library management. Thus, it has a state-of-the-art, cloud-based integrated library management system (ALMA©), through which the printed, electronic and digital materials of the UPC are managed. It also has an <u>online catalog</u> (PRIMO©), which provides centralized and personalized access to all physical, electronic and digital resources at all locations, with information about the availability of physical resources (including the possibility to request these resources for loan at the user's chosen location) and instant online access to electronic and digital resources.

Additionally, it has the LibGuides© platform which is an easy-to-use content management system implemented at thousands of libraries around the world. This is the way how the UPC's library system manages the Library Portal, the access to databases and the creation of thematic guides on different topics to support the teaching and learning process. Through the thematic guides, available as of 2021, a fine selection of books, journals, scientific papers, etc. are made available to the university community.

For the Architecture Program, five thematic guides have been prepared about sustainable design (<u>link</u>), architectural design (<u>link</u>), topography (<u>link</u>), urban planning (<u>link</u>), and construction (<u>link</u>). Table 5.13 summarizes the use of thematic guides in the Architecture Program between March and December 2021.

Thematic Guide	Architectural Design	Topography	Sustainable design	Urban planning	Construction
March	88	52	61	0	337
April	701	52	83	0	1106
Мау	1285	58	100	0	1747
June	1660	85	105	0	2504
July	2086	376	108	0	3247
August	2565	579	186	0	3838

Table 5.13. Use of thematic guides in Architecture Program 2021

²⁶¹ Appendix 5.35: Temporary policy for iPads loan (SICA-PYL-27)



Thematic Guide	Architectural Design	Topography	Sustainable design	Urban planning	Construction
September	3089	742	434	0	4700
October	3513	1007	689	224	5398
November	3714	1403	794	311	6114
December	3805	1531	817	316	6353

Source: LibApps Libguides Platform – DGC, March-December 2021.

Materials collection available at UPC Library for the Architecture Program can be categorized in (see details in appendix 5.36 Physical, Digital and Electronic Resources - Architecture)²⁶²:

• <u>Physical Resources</u>: There are 5121 titles (unduplicated book count) in total for the Architecture Program, and their availability for students and faculty per campus is shown in table 5.14.

Items	Monterrico Library	San Isidro Library	San Miguel Library	Villa Library
Titles	4,747	529	751	1239
Copies	8256	1106	1547	2216

 Table 5.14 Physical resources per campus

Regarding student per capita in 2021, relative to year 2019, the availability of resources has significantly improved:

- The per capita percentage of physical titles increased in 68%.
- The per capita percentage of physical copies increased in 31%.
- <u>Digital resources</u>: Within the digital collections available through the Library Catalog (link), there are electronic books (5222 unduplicated e-book count) and electronic journals (246).

The per capita percentage of electronic titles increased in 155%.

• <u>Databases</u>: There are 75 academic and research support databases (56 purchased and 19 of open access), for students of Architecture.

Table 5.15. Number of databases 2021

Memberships		Open Access		
Databases	Electronic journals	Reference manager	Databases	Electronic journals
31	23	2	12	7
	56			19

With regard to the demand of teaching and learning resources, the UPC Library is supported by a new proxy system to collect more detailed statistical data. The high frequency of use of electronic resources is evident in general terms as presented in tables 5.16 and 5.17.

²⁶² Appendix 5.36: Physical and Digital Resources – Architecture Program

Architecture	Downloads			Accesses		
Program	Number of downloads	Number of users	Per capita*	Number of accesses	Number of users	Per capita*
Faculty	256	87	3	316	136	2
Undergraduate students	10,751	1,887	6	9,092	2,684	3
General Total	11,007	1,974	6	9,408	2,820	3

Table 5.16. Use of databases per type of user 2021 (March-July) - Architecture Program

Source: Statistical System - Elogim, March - July 2021.

Table 5.17. Use of databases per type of user 2021 (August-December) - Architecture Program

Architocturo	Do	ownloads		Accesses		
Program	Number of downloads	Number of users	Per capita*	Number of accesses	Number of users	Per capita*
Faculty	504	58	9	521	112	5
Undergraduate students	11,575	1816	6	12,640	2,623	5
General Total	11,007	1,974	6	9,408	2,820	3

Source: Statistical System - Elogim, March - July 2021.

Regarding the dissemination of the theses completed in the study program and for students and faculty to have consultation tools available for their academic education and research support, UPC has an academic repository (link), which is a virtual space to gather, store, preserve and disseminate intellectual, academic, scientific and cultural production at UPC, resulting from their teaching and learning activities, research and social outreach.

The content published in the UPC Academic Repository is harvested by ALICIA (Free Access to Scientific Information), Digital National Repository of Science, Technology and Innovation managed by Consejo Nacional de Ciencia y Tecnología (National Council for Science and Technology) (CONCYTEC). It is also registered in the Confederation of Open Access Repositories (COAR).

Due to the sanitary emergency worldwide as of 2020, the Library services were adjusted to the online modality, creating new services. Some of these adapted services have been described above, others are described below:

- <u>Online Workshops on Information Literacy</u>: Since 2020, the 5 most in-demand workshops of the Information Literacy curriculum based on microlearning, published in the Library Portal<u>(link)</u>, are delivered virtually, so that all users have access to them because it is no longer necessary to schedule synchronous workshops.
- <u>Webinars and live transmissions</u> (New as of 2020-1): In order to promote and disseminate the use of electronic resources, a topic related to strengthen the Information Literacy learning outcome or a topic of interest for academic programs was developed for webinar and live transmissions for about one hour every week addressed to all the university community. The access to webinars is through the Library Portal or Eventos UPC web site (link).



- <u>e-Bibliography</u>: this service is one of the adapted services since 2020, related to materials offered as part of the mandatory bibliography for students, it can be found in digital and electronic version.
- <u>Research Resources Portal</u>: In 2021 this portal was renewed with a tool that helps to organize the data of all the Library's electronic resources and makes them available to all users (link).
- <u>Document Digitalization Service</u>²⁶³ (New): In 2020-2 term, due to the users' need to access book and/or article collections, the service of digitalization of book chapters and/or articles in journals was implemented for thesis students, master's students and faculty.

In relation to continuous improvement, the UPC Library receives feedback through satisfaction surveys every term. In 2020, surveys related to each digital service started immediately and both evaluations are available in parallel currently.

The UPC Library reaches a satisfaction level of 78% and 77% for 2021-1 and 2021-2 terms, respectively. In the monthly survey, the Library reaches a satisfaction level average of 93.4% during 2021.

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

Program Response: The Architecture program has a librarian assigned by the Knowledge Management Department. The librarian assigned to the Architecture program provides support to the teaching and learning process, and has the following functions and activities:

- Advisory service and academic support
- Liaison role in the evaluation of teaching and learning resources
- Liaison role in updating the basic bibliography of the courses
- Liaison role in the action plan for the Information Literacy learning outcome
- Liaison role in the acquisition of information resources

Once a year, the director of the academic program, together with the librarian assigned to the program, reviews the applications and approves the acquisition of documents (books, videos, learning kits, both digital and physical formats) according to the priorities of each program.

For the bibliography requests, faculty place them directly in the Request Form for the purchase of bibliography_(link), this form is completed with the data of the books requested. The Architecture Program's librarian receives all the requests, gathers and reviews them and then send them to the academic director, who approves the purchase.

For the case of requests of new databases, the program's faculty contact the librarian assigned to the Architecture Program and ask him/her for the resource purchase. The librarian sends the request to the Teaching and Learning Resources Department, and it will contact the supplier to evaluate the purchase in coordination with the librarians team, faculty and other DGC departments.

Additionally, specialized advisory²⁶⁴ was delivered virtually upon request of users through a web form. Currently, advisory sessions are automatically scheduled from the Library Portal (link). This service consists of 40-minute virtual sessions given by the librarians team using Microsoft Teams.

Likewise, LibAnswer© has been implemented, a system for online assistance using BiblioChat (<u>link</u>) and frequently asked questions (<u>link</u>) with specific answers for self-assistance to students and faculty²⁶⁵.

²⁶³ Appendix 5.37: Document Digitalization Service (DGC-I-26)

²⁶⁴ Appendix 5.38: Specialized Advisory Service (DGC-I-06)

²⁶⁵ Appendix 5.39: Protocol for Library Services (DGC-I-27) Appendix 5.40: Online Reference Service (DGC-I-28)

6—Public Information

6.1 Statement on NAAB-Accredited Degrees

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

Program Response: See link:

https://pregrado.upc.edu.pe/en/facultad-de-arguitectura/acreditacion/

6.2 Access to NAAB Conditions and Procedures

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

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

Program Response: See link:

https://pregrado.upc.edu.pe/en/facultad-de-arguitectura/acreditacion/

6.3 Access to Career Development Information

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

Program Response: UPC's Career Services Department has an active role seeking, enriching, and challenging internship opportunities and labor offerings as a facilitator between the labor market and our undergraduate and graduate students.

This department is responsible for managing the UPC's Placement Opportunities Platform which provides access to different companies and institutions that seek to contact our students and graduate students. Prior to releasing any offerings they are reviewed as part of the quality control measures.

This department also provides advice to our students on searching pre-professional internships, and supports our graduate students in the difficult and competitive process of placement in the labor market. It provides individual counseling for CV creation and jobs interviews, employability workshops and general concerns.

For the student handbook 2021, (Chapter 2) see link: <u>https://sica.upc.edu.pe/en/autenticado/handbooks</u> For UPC's Placement Opportunities Platform see link: <u>https://bolsadetrabajo.upc.edu.pe/login/?next=/</u>

6.4 Public Access to Accreditation Reports and Related Documents

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

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

Program Response:

See link: <u>https://pregrado.upc.edu.pe/en/facultad-de-arguitectura/acreditacion/</u>

For the following documents:

- The most recent decision letter from the NAAB
- The Architecture Program Report submitted for the last visit
- The final edition of the most recent Visiting Team Report, including attachments and addenda

See link:

- Quality Policy (Link)
- UPC's Educational Model (Link)
- Academic Freedom Policy (Link)
- UPC Diversity and Non-Discrimination Policy (Link)

For the following information

- Statements and/or policies on learning and teaching culture
- Statements and/or policies on diversity, equity, and inclusion

Not applicable:

- All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- The program's optional response to the Visiting Team Report
- Plan to Correct (if applicable)
- NCARB ARE pass rates

6.5 Admissions and Advising

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

Program Response: The complete admission process information can be found in the University web site, in the following links:



- Admission policy: https://sica.upc.edu.pe/en/categoria/planning-and-improvement/sica-pyl-08-undergraduate-admission-policy
- Application forms and instructions: <u>https://pregrado.upc.edu.pe/landings/eventos/evaluacion-arquitectura/</u> For the website translations see appendix 6.1²⁶⁶

Scholarships and financing: (for applicants) <u>https://www.upc.edu.pe/en/admision/</u>

Not applicable:

- Forms and a description of the process for evaluating the content of a non-accredited degrees
- Explanation of how student diversity goals affect admission procedures. (N.A. For further information see Section 5.5)

6.6 Student Financial Information

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

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

Program Response: (6.6.1 and 6.6.2) The university provides students and the public in general all the information on tuitions, financial aids, scholarships and funding in its institutional website through the following links:

Scholarships and financing: (for applicants) https://www.upc.edu.pe/en/admision/

- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/becas-internas-postulantes/
- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/creditos-externos-postulantes/
- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/creditos-externos-postulantes/
- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/becas-internas-alumnos/
- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/becas-externas-alumnos/
- https://www.upc.edu.pe/en/admision/becas-y-financiamiento/creditos-externos-alumnos/

UPC's Aid Service ("*Ayuda UPC*", in Spanish): Space implemented for the support and guidance on financial issues to our students during the pandemic. This space is used to communicate the different options for payment, the changes of some conditions to be able to access socioeconomic scholarships, with the objective of making some terms more flexible to support students with economic problems resulting from the health emergency.

• See link: https://contactoweb.upc.edu.pe/104306-ayuda-upc

Tuition and fees are posted in the university website in the following link: <u>https://www.upc.edu.pe/transparencia-upc/pensiones-y-tarifas/pensiones-pregrado/</u>

The Student Handbook[, handed out to all of our students in each enrollment process and posted online for free access and consultation at any time, offers detailed information regarding Tuition and fees, Scholarships and financing.

See link:

https://sica.upc.edu.pe/sites/sica.upc.edu.pe/files/handbook_ingles_2021_chapter_1-3_2.pdf https://www.upc.edu.pe/servicios/becas-creditos-y-cobranzas/politica-de-pensiones/

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