Universidad Peruana de Ciencias Aplicadas (UPC)
School of Architecture

Architecture Program Report for 2019 degree NAAB Visit for Initial Candidacy

Bachelor of Architecture + 210 credits

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APR – Section I – Program Description

I.1.1 History and Mission

a) UPC:

Created in 1993 by Law N° 26276[1], based on the need in Peru for professionals with a different vision and distinctive competencies, Universidad Peruana de Ciencias Aplicadas (UPC) is an innovative, private and research comprehensive educational institution that provides higher education at the undergraduate and graduate level, promotes scientific and technological research as well as cultural, intellectual and artistic knowledge.

In 1994, UPC launched its first admission process and in August 1994 the first academic term started at the Monterrico Campus, at that time the university comprised the following Schools: Engineering Sciences, Computer Sciences and IT, Communication Sciences, Administrative and Accounting Sciences and Architecture. The video UPC Timeline[2], shows the highlights in UPC´s history up to date.

UPC's commitment and responsibility with our country's development through education are clearly stated in its mission: "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." In order to achieve its mission and vision, UPC has established five values that guide its actions: innovation, leadership, teamwork, service, and excellence that are the vital pillars of its institutional culture.

Based on its mission and values, UPC educates upstanding and innovative leaders, offering meaningful programs. These programs are designed based on the guidelines established in UPC's Educational Model[3], in alignment with UPC's mission and values, and are continuously reviewed by different internal and external stakeholders to ensure their alignment also with social expectations and needs, and with the demands of the professional and labor field.

Nowadays, in the 21st century, UPC, according to its mission and vision, develops and promotes a culture of continuous improvement, which allows it to keep its educational offer to students under high quality and excellence standards, in order to meet the necessities and expectations of constantly evolving markets, keeping its validity and relevance over time.

This is evidenced through the permanent assessment of our pedagogical and educational approaches, the permanent update resulting from our contact with the market, the development of internationality, the constant update of technological resources, and others. All of this with the clear understanding that we are educating professionals for a future in which globalization, evolution, permanent renewal of knowledge and technology developments will be the main characteristics.

b) School of Architecture

The built-in process of the School of Architecture involved an analysis to compare the characteristics of the most representative Architecture programs in Peru and in the world. The prospects started at the end of 1993, allowing UPC's School of Architecture, still in a building process, to participate in a meeting in Miami, convened by President Clinton, in which an inter-American meeting of School of Architectures took place. UPC´s School of Architecture Dean, Miguel Cruchaga, was thus able to interview a significant number of deans from North, Central and South America, with whom he compared criteria and 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

[1] Appendix 1: Law N°26276 Creation of Private Universities
[2] Video: UPC Timeline
[3] UPC's Educational Model. Link.

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

With this commitment, UPC´s School of Architecture 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.

UPC's Architecture program is offered in three of the four UPC campuses. Monterrico Campus (since 1994), Villa Campus (since 2013) and San Miguel Campus (since 2015). The total amount of students enrolled in the 2018-2 academic term was 4,051, distributed as follows: 55% at the Monterrico Campus, 19% at the Villa Campus and 26% at the San Miguel Campus.

Our school, within the context of UPC, looks ahead and works for the validity of its approaches in the 21st century, through its permanent capacity to adapt to the changes in technological and pedagogical terms, and to the profile required in a globalized world characterized by the dynamics given by digital technologies, also through the always updated education of our students and the training of our faculty.

c) Benefits of the program for the institution (discovery, teaching, engagement and service):

The Architecture program highly represents UPC, providing it a relevant presence in the national educational and cultural environment. Some examples of activities and initiatives that show the benefits that the program provides to the institution are as follows:

- First Conference "International Experience in the Education of Architects," which took place on April 26, 2018. Participants: Manuel Fujii, Kyoto Institute of Technology, Kyoto, JAPAN. Cynthia Aguirre, École Nationale Superieure d´Architecture Paris La Villette, FRANCE. Francis Rivera, Universidad Politécnica de la Cataluña, Barcelona, SPAIN. Diana Torres, Universidad Católica de Chile, Santiago, CHILE. Jose Burgos, Universidad Politécnica de la Cataluña, Barcelona, SPAIN. Victor Bejarano, École Nationale Superieure d´Architecture Paris Belleville FRANCE, Université Catholique Louvein BELGIUM

- The series of lectures "UPC Talents: Graduates around the World" (2016), of former students for current students, showing the achievements of our graduates. Participants:

  - **MD27:** Andrea Jiménez: Master of Advanced Architecture, Columbia, NY: Experience at Ateliers Jean Nouvel. Luciana Cuneo: Universidad Iberoamericana, Mexico. Legorreta+Legorreta. Vietnam and Indonesia. Luis Pedro Diaz: Real Estate Management and Development Certificate Program. Rodrigo Escardó: Real Estate Management and Development Certificate Program. Experience at Arquitectónica, Miami and NY.

  - **NOMENA ARQ.:** Hector Loli: International Speaker in Fortaleza, Santiago, Quito and Texas. Moris Fleishman: University of Tel Aviv, International Workshop "SOS Cities." Jorge Sánchez: Universidad Técnica Superior de Barcelona, Master of Housing and Urbanism, AA of London. Diego Franco: Master of Advanced Architectural Projects, Politécnica de Madrid. Researcher "De Mies a Vacchini"- Publications: Compositions.

  - **CHENG + FRANCO:** Jorge Cheng: Master of Architecture and Urbanism, AA of London. Partner in Michael Aukett Architects. Riba Part III Architect, UCL Bartlett. Lorena Franco: Master of Architecture and Urbanism, The Berlage Institute, Neatherlands. Development of Projects in "Foster+Partners". RIBA Part III Architect, University of Westminster.

  - **SHELL ARQ.:** Alejandro Shell: Collaborator as a local architect in different projects along with Hans Hollein, Ateliers Jean Nouvel and Grafton Architects. Experience in the area of commerce, retail, offices and housing.

- "Forum of Architecture Teaching in Peru" (2018)

- Conferences with international guests, such as:

  - "Cultural Heritage Preservation: Material and Technological Aspects vs Values and Authenticity." carried out by Dr. Anna Lobovikov Katz, Technion – Israel Institute of Technology

  - "Do you have questions about the BIM program? BIM Developments (Building Information Modeling)?" carried out by Arch. Oscar Liébana, Director of the area of Architecture and Engineering of Universidad Europea de Madrid

- Since 2005, the School of Architecture has organized the **IX Congress of Sociedad Iberoamérica de Gráfica Digital (SIGRADI),** and has held a regional representative role in the Board to date, including the chair from 2015 to 2017. In 2021, they plan to organize the XV SIGRADI Congress.

- Active participation in social extension activities, such as the one held in February 2019 with "Make a Wish" (https://www.makeawishperu.org/) at our Villa Campus. The video: Make a Wish Peru – UPC[4], shows a summary of the activity.

d) Benefits deriving from the institutional context to the program

Some of the benefits are:

- The horizon of internationality is extended through framework agreements that UPC develops and keeps with other institutions

- UPC's institutional commitment to promoting and developing a research culture in all of its programs

- The financial strength and support for the execution of program activities, as well as its initiatives and projects

- Appropriate and broad infrastructure with suitable facilities, resources and services

- 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.

- Culture of quality, excellence and continuous improvement

- The Integrated Quality Management System, under the international standard ISO 9001:2015, certified by Lloyds Register for academic and administrative processes

e) How the program encourages an integrative study of the liberal arts and the specific discipline of Architecture for the holistic development of young professionals

- It promotes opening perspectives on reality and mainly on Architecture through design workshops, in which more freedom for project task approaches is promoted.

- The holistic nature in the education of students with a curriculum in which the design workshops are accompanied by other academic areas, concerning graphic expression, construction technology, urban planning, history of art and architecture, which complete the humanistic and comprehensive vision of the broader context of the architectural activity (cultural, social, economic, scientific).

- It promotes an education in which the student plays an active role that fosters experimentation and creativity, and that permanently considers the global and local reality in a comprehensive manner.

[4] Video Make a wish Peru – UPC

- A one-on-one teaching experience in the architectural design workshops and construction workshops, with a maximum standard of 12 students per professor.

- International agreements with diverse exchange opportunities that enrich the educational experience, providing it with a truly global sense that is also achieved with study trips.

- The level of education in the discipline is ensured with the best professionals active in the industry in the architectural design workshops. In fact, it is necessary to be a member of the **Peruvian Architects Association (CAP)** to teach in our school. This association rules the professional practice in our country.

- The professors of the architectural design workshops work along with their students in their workshops, with the perspective of a future development of the architectural discipline, promoting research to become a school that responds to social and technological changes.

- Construction practices: UPC's School of Architecture uses construction labs in each campus, which emphasizes the active learning methodology.

- Moreover, the diverse academic missions to Italy, France, China, Japan, U.S.A. (Oklahoma), Peru (north and south), and recently Spain emphasize the holistic development of young professionals through a comprehensive study of liberal arts and the specific discipline of architecture in different parts of the world.

- International programs of UPC's School of Architecture. https://pregrado.upc.edu.pe/en/facultad-de-arquitectura/carrera-de-arquitectura/internationality/

I.1.2 Learning Culture

a) Learning Culture and Studio Culture Policy

As stated in UPC´s Plan for Achieving Initial Accreditation - PAIA[5], UPC's mission is to educate upstanding and innovative leaders with a global vision, who will transform Peru. Its purpose is guided by the following values, which the entire university community members share and practice: Leadership, Teamwork, Service Orientation, Excellence and Innovation.

The University acknowledges that its task is based on three essential elements: their faculty, students and staff, among which it promotes free debate of ideas in a respectful and tolerant environment, without fear of censorship or reprisals, as stated in our Academic Quality Policy and Objectives[6], which establishes our commitment to the highest quality standards, as well as the guidelines and academic quality objectives with which we commit ourselves institutionally and that constitute the guide to all of our academic activity.

Concerning freedom of expression, UPC has an Academic Freedom Policy[7] that states that respect for human condition implies interest in knowing, learning, promoting, respecting and tolerating the timely and appropriate expression of various ideas. The academic institution, through its faculty, students and administrative staff, must show real interest in building knowledge based on those ideas.

Within this context, UPC's Educational Model[8] is oriented toward educating students as competent professionals and upstanding leaders, and in relation to our School, educating architects with a wide perspective of the creative process, through an education that prepares them to apply knowledge, practice reflection, and have critical awareness in the face 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.

As part of UPC, the School of Architecture is aligned with the philosophy, culture, and context aforementioned. Diversity of ideas, perspectives and options are respected, encouraged and valued by this School; this allows

[5] Appendix 2: UPC Plan for Achieving Initial Accreditation
[6] UPC Academic Quality Policy and Objectives: **Link**
[7] UPC Academic Freedom Policy: **Link**
[8] UPC Educational Model: Link

a wide perspective on architecture that generates a learning environment that enables exchanging and sharing ideas, developing creativity, and promoting students' commitment to learning, which facilitates their comprehensive development.

Consequently, UPC's Learning Culture evidences its alignment with the Learning Culture promoted by NAAB in its accreditation standards, based on a respectful and positive learning environment that encourages optimism, respect, commitment, sharing, and innovation.

The following documents express UPC's Learning Culture and, therefore, constitute the School of Architecture's Studio Culture Policy:

- Academic Quality Policy and Objectives
- UPC's Educational Model
- Academic Freedom Policy

This learning culture is lived, kept and promoted in our School of Architecture in each of the three campuses in which the program is offered, through:

- The promotion of creative freedom
- An academic environment with a good student-professor relationship
- The architectural design workshops foster a customized education
- A teaching-learning process in which students play an active role
- The promotion of critical reflection, analysis, discussion, evaluation, presentation, and interaction with their peers
- A curricular design that articulates different areas (graphic expression, construction, urban planning, history, theory) regarding architectural design workshops

Regarding the student's active role in the teaching-learning process—and focusing on the motivation to generate learning inside and outside the classroom—the independent and self-regulated learning principle is especially relevant. The following are some activities that generate learning spaces outside the classroom:

- **Pre-professional internships:** aimed at allowing students to apply their acquired knowledge and competencies through experiencing a real work situation in companies and institutions that are directly related to their program. These internships are mandatory for the UPC undergraduate programs to obtain the Bachelor's degree, and are regulated by the Rules and Regulations for Pre-Professional and Professional Internships[9].

  Upon earning 100 credits in the academic program, students can do a first-level internship and, after earning 147 credits, they can do a second-level internship; different objectives are established by the regulations for each level. Four pre-professional internship credits—which correspond to 160 work hours—are required. For each internship, students must be assigned to a direct supervisor, responsible for guiding them during their internship, and assessing their performance.

- **Extracurricular activities[10]:** UPC's University Life Department is in charge of managing extracurricular activities offered at an institutional level to complement academic education by developing four co-curricular learning outcomes: leadership, global vision, self-development and social initiative. As part of the requirements to obtain the Bachelor's academic degree, students must earn four extracurricular credits. The extracurricular activities can be grouped under the following categories: University Volunteering, UPC Sports, UPC Groups, Troupes and Clubs, Extracurricular Workshops, Cultural Activities Passport, Services for the University.

[9] Rules and Regulations for Pre-Professional and Professional Internships: **Link**
[10] University Life Department's Blog: **Link**. This website is currently in Spanish

- **Construction Labs:** Architecture students may 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, in a responsible and respectful manner.

- **Exhibitions:** students and faculty are able to become involved and interrelate through different exhibitions, conducted regularly during the academic terms and at the different campuses. Students, alumni, university administrative staff, and parents take part in these activities.

- **Academic Missions:** these academic trips are a highly efficient means to promote student's global vision and creativity; this is achieved through learning history; being in contact with different cities—both ancient and modern—, paradigmatic architecture works, different cultures; and experiencing participation in the mission.

  Each academic mission includes a preliminary preparation program, a strict schedule and a subsequent public presentation aimed at sharing the experience with other students. The School of Architecture proposes their students and faculty pedagogical experiences to live in situ the development of the profession in different scenarios, generating a sense of belonging and a global sense, as well as the interaction with students from abroad. Each of our academic missions are described in Appendix 3[11].

- **Course Representatives:** the possibility of participating individually as representatives for the different sections of the program courses is also an opportunity for promoting student's learning as they cooperate with the professor by being mainly a contact between him or her and their classmates. Through activities, students practice commitment, responsibility, order, leadership, and team spirit.

b) Distribution and Diffusion

The documents collected by UPC's Learning Culture comprising the School of Architecture's Studio Culture Policy: Quality Policy, UPC Educational Model, and Academic Freedom Policy are distributed to our community by the following means:

- **Student Handbook[12]:** this Handbook is meant to be a useful tool to know what it takes to be a UPC student. It comprises a brief of the university's Educational Model, the Academic Quality Policy and Objectives, as well as the Academic Freedom Policy that regulates our activities, among other relevant documents for a UPC student.

  It is delivered during the enrollment process to all students in the university and it is permanently on display in the university's web page via the following link:
  https://sica.upc.edu.pe/en/autenticado/handbooks

- **Faculty Handbook[13]:** UPC faculty members receive this manual as a useful tool to get to know what it entails to be part of the UPC faculty. It comprises a brief of the university's Educational Model, the Academic Quality Policy and Objectives, as well as the Academic Freedom Policy that regulates our activities, among other relevant documents for a UPC faculty member. It is permanently on display in the university's web page via the following link:

  https://sica.upc.edu.pe/sites/sica.upc.edu.pe/files/FacultyHandbook.pdf

- **UPC´s Integrated Quality System (SICA):** UPC faculty and staff is informed and have permanent access to our Educational Model, the Academic Quality Policy and Objectives, as well as the Academic Freedom Policy, through our Integrated Quality System site https://sica.upc.edu.pe/en.

  The purpose of the SICA website is to provide users with information concerning policies, regulations and documentation of all UPC processes, with the goal of becoming a tool that facilitates the

[11] Appendix 3: Architecture Academic Missions
[12] Student Handbook: Link
[13] Faculty Handbook: Link

management, consultation and monitoring of the Quality System of our institution, with our three vital elements: faculty, students, and staff.

With regard to the diffusion in the School of Architecture, in its regular activities it provides environments where its Learning Culture and Studio Culture Policy are spread in their essence:

- **Architectural Design Workshops Tour[14]:** this program assessment activity is carried out at the end of each academic term at each of the three campuses, and conducted under the direction of the School Dean and the Program Director, with the collaboration of the entire faculty of courses involving Architectural Design Workshops.

  It consists of a presentation and a tour of the final assignments of all the architectural design workshops of the program, allowing the exchange of ideas and discussion on the work performed and its results. The faculty is able to express their critical opinion, and to indicate the value of particular achievements or the need to reformulate working methods for the workshops.

- **Faculty coordination meetings[15]:** held at least two times per academic term, they are also a means to disseminate our Learning Culture and Studio Culture Policy essence through the discussion of contents, approaches and proceedings to improve the learning process.

- **Course representative meetings:** a course representative is a student chosen by his/her classmates to be their spokesperson and representative, before the professor, faculty and other academic or administrative authorities. One representative is elected for each one of the sections of every course in the program. These meetings are carried out at each campus, at the beginning of each academic term.

- **Meeting of the School of Architecture Dean with the students:** these meetings are held at each of the three campuses, and mainly address the characteristics of our learning culture:

  - The promotion of creative freedom
  - An academic environment with a good student-professor relationship
  - The architectural design workshops with a customized education
  - A teaching-learning process in which students play an active role

c) Learning Culture and Studio Culture Assessment

As of 2019, the School of Architecture incorporates, as a good practice, the process to asses, analyze, identify improvement opportunities and consequently build an action plan for continuous improvement of its Studio Culture in its academic community. This assessment process is defined as follows:

1. Implementing evaluation through the following tools:

   Surveys aimed at measuring the knowledge and understanding of students, faculty, and staff of the School of Architecture, of our Academic Quality Policy and Objectives and Academic Freedom Policy. It will also require suggestions from these stakeholders on these matters, providing an input for the continuous improvement plan. This survey will be applied every two years.

   Focus group on UPC's Educational Model in the Architecture program, with the participation of the various stakeholders of the School of Architecture. It will focus on topics such as: competency-based learning, student-centered learning, learning in diversity with a global vision, learning towards sustainability; as well as institutional learning outcomes and program learning outcomes. In this way, we can measure the knowledge and understanding of our Educational Model, and collect input for the continuous improvement plan. These focus groups will take place every four years.

[14] Architectural Design Workshops Tour 2018-2 videos: Monterrico Campus, Villa Campus, San Miguel Campus
[15] Appendix 4: Faculty coordination meetings

2. The program director is responsible for integrating the results in a report, which will be evaluated by the School of Architecture Committee. This committee is conformed as follows:

   - Dean
   - Program Director
   - Full Time Faculty[16]: 04 FTF-Academic Coordinators, 05 FTF-Academic Advisors, 01 FTF-Research
   - The Dean Assistant

3. The School of Architecture Committee diagnoses, identifies improvement opportunities and defines improvement plans, establishing the goals that must be validated in the next evaluation round.

   The commitment of the School of Architecture is to implement the assessment process with the application of these evaluation tools this year.

I.1.3 Social Equity

UPC recognizes that its community is composed of an extremely talented and diverse group of students, faculty, and staff. The diversity of its members is among the main reasons why UPC has been acknowledged for its contribution to higher education and to the development of the country. It is part of our culture. UPC has implemented a diversity and non-discrimination institutional policy[17], applied in all procedures and activities of the university, its schools and programs.

UPC has always promoted diversity and its value among its members and is committed to having an environment free of discrimination or harassment based on race, gender, sexual orientation, religious beliefs, age, disability, or marital status. UPC strives to foster an environment that is open, inclusive, and allows equal opportunity. The admission of students, the selection and hiring of faculty and staff, the acknowledgement of faculty and staff, and any benefit or obligation generated must be carried out without any bias based on the aforementioned characteristics.

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

UPC is institutionally accredited by WASC Senior College and University Commission – WSCUC, and for the Annual Report to WSCUC, our institution provides information on gender diversity. As for this year's report, the Architecture program, in 2018-2, out of a population of 4,052 students enrolled (unduplicated headcount), 62.40% were female (2,528 students) and 37.60% were male (1,523 students).

With regard to the program faculty teaching during the second term of 2018, out of 287 faculty members, 33.1% were female and 65.70% were male.

The country's diversity makes pluralism a topic that comes up naturally inside the culture of the university. Complementary information about diversity data can be provided from an economic perspective. The University has defined a six-tier payment structure to address the different economic situations of its students. In this regard, in the 2018-2 term, we considered the following distribution:

[16] School of Architecture, full time faculty (FTF) categories:
FTF-Academic Advisers represent the Dean and Director of the Architecture Program at each campus concerning the support and supervision of the academic activities of the program.
FTF-Academic Coordinators support the Program Director with the execution and supervision of the program strategic and operational plan, emphasizing the achievement of the student's learning objectives and UPC's Educational Model compliance.
FTF-Research generate and lead the school's research projects, which involves faculty and students in order to strengthen the University's research topics.
FTF-Construction Workshop coordinate the development, improvement and continuous evaluation of the construction workshops and guarantee the standards at the three campuses.

[17] UPC´s Policy on Diversity and Non Discrimination: Link

Table 1: Architecture students 2018-2: socio-economic distribution in the program

Tuition Fee structure[18]	**ARCHITECTURE PROGRAM STUDENTS**			
	Monterrico Campus	San Miguel Campus	Villa Campus	General total
Q	30		3	33
R	102	2	8	112
S	159	10	25	194
T	379	151	88	619
U	1493	960	635	3089
V	1	3	1	5
General total	2164	1126	760	4052

As the economic factor can hinder the access to education, UPC—according to its commitment to equal opportunities—takes action to mitigate this difference through its scholarships system and socioeconomic reclassification, which is regulated in detail by UPC´s Administrative Academic Regulations[19].

Another dimension of UPC´s commitment to guaranteeing equal opportunities is also underpinned in the university's Student Disability Policy[20], ensuring the application of practices in accordance with Peruvian law. The university is responsible for the wellbeing of students with disabilities, and for playing an active role in promoting their inclusion in the University. This commitment is shared by the entire university community, and is oriented to assisting students with disabilities, so they can be educated as upstanding and innovative leaders to transform Peru with their global vision.

I.1.4 Defining Perspectives

UPC's School of Architecture's mission is to develop students' aptitudes to understand, conceive and execute building projects within the professional practice of architecture.

Reason, emotion, intuition and knowledge must converge in these projects with balance to create physical forms that properly respond to society and the individual's needs.

a) Collaboration and Leadership

From the start of the program in the different design workshops, students are trained for teamwork and interpersonal collaboration. The initial stage of the workshops consists of teamwork, which will serve for the next stage when students work individually for the production of design results.

Shared results and necessary cooperation are reflected in the construction courses, where students are divided into groups and play different roles in order to organize the building process of modules that must be completed and presented by the end of the academic term.

There are specific courses in which students are trained to work with the different specialists that participate in the building process, such as the Professional Project Guidelines course, where students do research on the requirements for the thesis project, and the Professional Synergy course, in which they play roles with the various actors involved in the building process.

[18] Administrative Academic Regulations: Link
[19] Student Disability Policy: Link

b) Design

The architecture program develops the design practice in three stages through its ten architectural design workshops. The first stage may be referred to as the take-off during the first two academic terms, where students immerse themselves in the creative process, trying to awaken their imagination and creativity through forms, proportion, spatial management, and scale exercises based on various conceptual pretexts.

The second stage consists of the practice of the architectural design where greater complexity and variables are gradually introduced with emphasis on different aspects such as surroundings, function, environment, even dealing with urban topics in the eighth workshop called Architecture and Cities. The design workshops are developed in parallel with history, human sciences, basic sciences and construction, visual arts and elective courses.

The third stage aims at preparing students for professionalization and the development of the professional project that will allow them to graduate as architects. This goal starts with the courses in the research line in the sixth term and finishes with the professional practice workshop in the ninth term and the thesis workshop in the tenth term. This process is of particular importance because students face, for the first time, the challenge of proposing a research topic on their own that will allow them to start their professional project and they must carry out all the stages autonomously with the assistance of their professors.

c) Professional Opportunity

These student education and learning processes are put into practice and experienced in the professional environment, through the pre-professional internships that students must do. These internships are required to obtain the Bachelor's degree in all of UPC's undergraduate programs; four pre-professional internship credits—equal to 640 hours of internship work - are necessary. This is regulated by the Rules and Regulations for Pre-Professional and Professional Internships[21].

Pre-professional internships aim at allowing students to apply their acquired knowledge and learning outcomes through experiencing a real work situation with the demands and regulations of professional practice, as well as with the administration and management of a private architecture studio. The Career Service Office, in that sense, helps students to find a suitable place to carry out their professional internships.

In addition, the AR248 Real Estate Management course, taught in the ninth term, brings students closer to real estate development, its different actors and processes. It broadens students' vision regarding the different activities they can carry out as professional architects.

d) Stewardship of the Environment

One of the pedagogical principles of UPC´s Educational Model is learning towards sustainability. It establishes that sustainable development is achieved when present needs are fulfilled without jeopardizing future generations' wellbeing. To this end, a balanced and comprehensive approach of the economic, social, and environmental dimensions must be applied.

Environmental education is addressed in a sequence of courses throughout the architecture program that introduce students to the knowledge and management of the environmental variables and how to reduce the negative impacts on the environment.

As of the third term, in the AR85 Architectural Analysis and Topography course, students acquire basic knowledge of weather, sun path, topography and passive systems of solar conditioning in architecture. These subjects are further addressed in the AR261 Sustainability and Environment course. Subsequently, they are covered with a more practical approach in the AR263 Architecture and Environment workshop. From this point on, it becomes a common aspect for design proposals until the end of the program, being discussed theoretically in the eighth term in the AR98 Special Equipment and Installations course where active means of environmental conditioning are studied.

[21] Rules and Regulations for Pre-Professional and Professional Internships: **Link**

The School encourages students to participate in projects and contests related to the management of the environment.

e) Community and Social Responsibility

The program's design workshops propose study cases and projects concerning the understanding of the architect's social responsibility with the community. Here some subjects as examples related to social responsibility in the previous 2018-1 term:

Table 2: 2018-2 Program courses – Social Responsibility Projects

Course	Project	Faculty in charge
AR279 Workshop VI Architecture and Construction	Artist Community Center / Barranco	Mercedes Alvariño Elizabeth Cárdenas
AR279 Workshop VI Architecture and Construction	Affordable Housing Residential Complex, District of Rimac	Jose Barrenechea Miguel Angel Vargas
AR260 Workshop IV Architecture and Functionality	Fishermen's Shelter National Reserve Noryauyos Cocha.	Gonzalo García María Alejandra Briceño
AR260 Workshop IV Architecture and Functionality	Multi-family Housing in Rimac Foot of the San Cristóbal Hill	Enrique Gómez de la Torre, Hugo Iberico
AR268 Workshop VII Architecture and Integration	Sports Rehabilitation Center Villa El Salvador	Gladys Hishikawa Alejandra Jordán

The School of Architecture organizes an Advanced Design Workshop under the responsibility of an internationally recognized Peruvian architect that discusses issues related to cities and "good living." Some of the subjects discussed over the past few years include the following:

Table 3: Advance Design Workshop

Version	Subject
Advanced Design Workshop 2018	A teaching center for architecture today
Advanced Design Workshop 2017	Housing and urban square. Three densities
Advanced Design Workshop 2016	Urban Multinationality. Multifamily housing program, offices and a cultural center complex
Advanced Design Workshop 2015	Library and media library: light, silence, sound, and movement in Architecture
Advanced Design Workshop 2014	Towards a new multi-family building. New approaches to living in a residential building
Advanced Design Workshop 2013	Housing: from a single-family to a multi-family building
Advanced Design Workshop 2012	The Convention Center of Lima as a Design Exercise
Advanced Design Workshop 2011	Free vertical multi-family building and linear vertical multi-family building
Advanced Design Workshop 2010	Criteria for construction in the coastline of Lima
Advanced Design Workshop 2009	Criteria for multi-family densification in residential areas of Lima

The School promotes students' social responsibility initiatives and their participation in projects and competitions of the same nature. In the international contest "Here for Good," one of our graduates won first place with a proposal for a house designed for the cold climate of the Peruvian Andes.

On February 18, 2019, our School carried out an activity in the Villa Campus for Make a Wish Peru: Https://www.makeawishperu.org/.. It was about fulfilling **Kevin Jean Pierre Rioja Aguirre**'s wish. He is a 17-year-old teenager suffering from osteosarcoma who dreams of being a great architect. The School's students and faculty participated. Kevin visited the construction workshop. In the design workshop, he became chief architect and the school's participants became his interns and support to create an area aimed at his favorite

superhero, Iron Man, and it was carried out based on previously manufactured pieces. The video summary of this activity can be found in the video–Make a wish Peru - UPC[22].

I.1.5 Long-Range Planning

The School of Architecture's strategic plan was drafted for the 2016-2020 period aligned with UPC's Institutional Strategic Plan for the same period. In its analysis, the strategic planning involved the institutional guidelines, the information provided by the program stakeholders, the program assessment results and the results of academic management indicators. In addition, the structure of the strategic plan incorporates the measurement indicators developed from the quality objectives defined in UPC's Academic Quality Policy and Objectives[23]:

1. To improve the results of the students' learning (student learning outcomes) steadily
2. To improve the 360° Assessment index of the faculty steadily
3. To improve the students' graduation rate
4. To improve the university's NPS steadily
5. To improve the university´s internationality index
6. To maintain the employability rate of graduates
7. To increase the university's scientific and technological production through research
8. To increase the impact index, which is the result of the university's social responsibility and volunteering activities
9. To incorporate techniques and technologies to support the academic processes and support the students of the university
10. To ensure institutional accreditation and continue with the programmatic accreditation processes

With regard to NAAB perspectives, Collaboration and Leadership, Design, Professional Opportunity, Stewardship of the Environment and Community and Social Responsibility are already part of the School of Architecture's philosophy and the program essence, and are taken into account in its long range planning.

For students to achieve the program learning objectives, the perspectives of design, collaboration and leadership have a fundamental role and presence in the backbone courses of the Architecture program which are the architectural design workshops. The perspective of professional opportunity is developed in the management courses line of the program, and in the internship graduation requirement, which assesses the student's performance not only in the courses, but also in the employer's report.

The Stewardship of the Environment and Community and Social Responsibility perspectives are incorporated transversally into the courses of the program's design line, which can be evidenced in the selection of the topics that are addressed.

Although this strategic plan has a five-year span, it is reviewed annually by the Program Director and Dean, and as result of this review and considering also the institutional plan review, adjustments are approved based on the results obtained from the indicators of the strategic objectives.

[22] Video Make a wish Peru - UPC
[23] UPC Academic Quality Policy and objectives. **Link**

I.1.6 Assessment

a) Program Self-Assessment

UPC is an institution committed to academic excellence and, according to this commitment, has developed and implemented a Quality Assurance System to design, execute, evaluate and improve its entire academic and support processes continuously, to guarantee quality management by promoting the constant implementation of best practices and management indicators.

Since 2013, UPC's Quality Management System has been certified by ISO 9001. In September 2015, a new ISO 9001 certification was issued, which includes risk management validation. This certification represented a goal achievement and, at the same time, a challenge to maintain and always improve the quality standard of all academic processes of the University; thus, consolidating our continuous improvement culture aimed at providing excellence education and providing evaluation tools for conducting a meticulous and critical analysis of their management.

UPC´s means for continuous improvement are shown in the table below.

Table 4: UPC Continuous improvement means:

Program Review	It is a comprehensive self-evaluation of the program. It considers strategic management, student and alumni results, faculty management, curricular management, and research results. The process includes planning, self-study, peer assessment, and the implementation of an improvement plan. It is conducted by the Program Review Committee and it is implemented every five years. The Program Review of Architecture was conducted by the end of 2015, having submitted the self-assessment report in October, to later undergo the external peer evaluation stage, and finally use the results obtained to identify the improvement opportunities for the implementation stage.
Internal and External Audits	Processes are analyzed in a systematic and independent manner to determine if the quality management system activities comply with the established procedures, and if these are efficiently executed. Results demonstrate the performance and fulfillment of the regulations and policies established in the University's Integrated Academic Quality System (SICA). The internal auditing process as well as the external are conducted bi-annually, in each case by internal and external auditors respectively, the latter by the British certifying entity Lloyd's Register Quality Assurance (LRQA).
360° Evaluation	Comprehensive assessment of faculty performance conducted annually. This evaluation was designed by integrating five dimensions: student evaluation, program director report (peer evaluation), internal training, regulation compliance, faculty self-assessment. The Evaluation Office of the Quality Assurance Department is in charge of processing and recording the 360° Evaluation results for each faculty member. The Rector reviews and approves this report; then, each professor´s results are reported to the Program Director, Educational Quality Department, Process Design and Implementation Department, and the faculty themselves.
Individual Course Evaluations[24]	The course evaluation, called academic survey, is a student opinion survey with regard to the academic development of the courses, which is carried out twice each academic term as part of the faculty evaluation. The area coordinators meet with faculty members that have obtained an average grade below what is required and respective corrective actions are proposed by mutual agreement.

[24] Appendix 5: Faculty assessment results. 2018-2

Strategic Objectives Indicator System	UPC has established an Academic Quality Policy and Objectives[25] that involves all the institutional members for compliance. Therefore, to continuously evaluate its compliance and the results obtained, and to implement improvement actions, a strategic objective indicator system has been designed, based on our academic quality objectives stated in the policy. These indicators are part of all UPC programs' strategic plans; therefore, they are part of the Architecture program and School's strategic plan, developed for the 2016-2020 period, which is annually reviewed by the program Director and Dean to evaluate results obtained for each indicator in relation to the goals established for that year, the efficacy of implemented actions, and the adjustment proposal based on that review and analysis, always under an academic excellence approach.

b) Curricular Assessment and Development

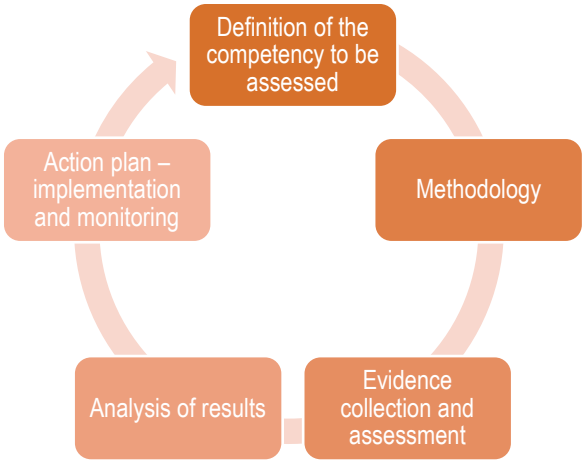
UPC, consistent with its commitment to academic excellence, has an institutional curricular assessment plan, defining guidelines and processes that allow measuring and assuring the development of the ILOs and PLOs in the entire educational community. We define assessment culture as the organizational environment where decisions made are based on facts, research and relevant information analysis to identify opportunities for improvement that maximize the students' learning outcomes. Each program, in coordination with the Educational Quality Department has set a 4-year assessment loop. The Architecture program assessment schedule is presented in Table 3.

Table 3. Assessment Plan: Architecture Program

Specific Competencies (Program Learning Outcomes – PLOs)	**Measurement Cycle**
Critical Thinking and Graphic Representation	2018-1
Building Practices, Technical Skills, and Knowledge	2018-2
Integrated Architectural Solutions	2019-1

The cycle of this learning outcome assessment process can be illustrated as follows:

Figure 1. Learning outcome assessment cycle



[25] Academic Quality Policy and Objectives: Link

Table 5 identifies all the parties in the curricular assessment process of the Architecture program.

Table 5 – Participants in the curricular assessment process of the Architecture program

Participants	**Roles and Responsibilities**
Program Director	Responsible for the process. They must ensure its proper development.
Full-Time Faculty	Responsible for carrying out the operational part of the process and ensuring compliance with the schedule specified. They coordinate the collection of appropriate evidence and the preparation of the assessment report.
Full and Part Time Faculty	Members of the Expert Committee-Rubric They develop, calibrate, and validate the rubric of the program specific learning outcomes.
Full and Part Time Faculty	Members of the Evaluation Committee They calibrate the rubric and evaluate evidence.
Faculty, Students and Graduates Representatives	They participate in the results analysis meetings. Based on the results obtained, they propose the necessary changes to improve them and prepare an action plan.

A brief on the curricular assessment of the program is presented in Appendix 6[26].

[26] Appendix 6: Curricular Assessment

APR – Section 2 – Progress since the Previous Visit

Not applicable.

APR – Section 3 – Compliance with the Conditions for Accreditation

I.2.1 Human Resources & Human Resource Development

a) Faculty Workload Balance

UPC ensures sufficient number of faculty through the annual human resources budgeting process, wherein every director includes new staffing needs for the upcoming 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, instruction, dissertation committees, tutoring and advising activities, research, among others.

UPC has established a framework of action structured by policies, regulations, procedures and performance standards to ensure the adequate development of its faculty. In that sense, the workload provisions for full and part time faculty are:

- Full-time faculty[27]: professors with teaching, research, and administrative tasks. Their workload cannot exceed 40 hours per week.

- Part-time faculty: professors dedicated to teaching and participating in academic coordination. Their workload that cannot exceed 23 hours per week.

Educational Effectiveness is evaluated through different processes, including assessment, program review, faculty evaluation, student performance evaluation, student's internship results, employability results, and employers' evaluation. All this processes are standardized through UPC's Academic Quality Assurance System (SICA) and are performed by the Office of Institutional Research and Effectiveness with the support of faculty members. The Quality Assurance and Educational Quality Departments provide programs guidance and support.

UPC is truly oriented to strengthening faculty commitment and to promoting faculty governance. A set of committees that includes primarily faculty participation (full-time and part-time) has been implemented. Some of these are as follows:

- Advisory Committee (reviews the overall academic program)

- Curriculum Change Committee (designs changes in the curriculum, course content, credit hours)

- Assessment Committee (reviews the results of assessment and establishes improvement plans)

- Program Review Committee (performs program review, reviews peer evaluations, and implements improvement plans)

- Accreditation Committee (steering committee for programmatic accreditation)

- Research Committee (reviews research proposals for assignment of UPC funding)

- E-learning Committee (reviews blended and online course contents)

[27] Appendix 7: Full Time Faculty Resumes

b) Faculty and Staff Professional Development

In addition, UPC is an organization that learns, transmits, and applies the acquired knowledge, and promotes the staff and faculty's personal and professional development in order to contribute to the institution's mission and vision. Under this perspective, the institution promotes and manages training opportunities that may be developed internally or externally. It should be noted that our faculty are duly registered with and are members of the **Peruvian Architects Association (CAP).**

External training opportunities are linked to those courses or programs that are held outside of UPC and that are directly related to the improvement of professional development. A punctual example is the doctoral training initiative in the doctoral programs offered by Universidad Politécnica de Catalunya (Polytechnique University of Catalunya) (Spain), Escuela Superior de Economía y Administración de Empresas (Higher School of Economics and Business Administration) - ESEADE (Argentina), Universidad de Piura (University of Piura) and CENTRUM Católica (Peru). This training initiative includes over 30 faculty members. They receive financial benefits that cover 50% of the doctoral program total investment.

On the other hand, internal training opportunities pose a wide spectrum of possibilities for professional development. This goes from conference participations, workshops and courses to the opportunity to access the academic offerings of UPC's Graduate School, ongoing education courses, specialized programs, and even masters, with scholarships that can cover up to 75% of the program value, in addition to the payment arrangements.

Regarding specifically faculty, UPC ─through its Educational Quality Department─ has defined the General Guidelines for Faculty Training[28]. These guidelines were created based on the idea that faculty's responsibility is not solely oriented to knowledge transfer, but towards the comprehensive vision, that has the students' development of competences as its core. Therefore, faculty is required to receive training and to learn continuously, so they can develop the competences that form the profile of UPC faculty:

- Pedagogical competence (being a professor): capable of designing, facilitating class sessions, and evaluating learning achievements
- Personal competence (being a person): capable of creating a teaching-learning culture based on respect, communication, team work and democracy
- Innovation competence (being innovative): capable of integrating in a creative manner and integrating technological tools and versatile materials to obtain the learning achievement
- Management competence (being a manager): capable of planning and managing the learning process, considering the information management

The Faculty Development Area of the Educational Quality Department prepares a faculty-training curriculum that aims to reinforce the teaching competences through the acquisition of tools, strategies and methodologies.

Each undergraduate program professor is responsible for fulfilling a minimum of 20 hours of internal and/or external training per year.

Additionally, in 2016 and 2017, two online learning platforms were enabled, One Faculty by Laureate and Faculty Development by Laureate, with the purpose of providing UPC faculty with additional opportunities to participate in international training programs and to strengthen the pedagogic competences.

The courses were focused on the faculty's competences development, learning methods (case methods, collaborative learning, project-based learning, problem-based learning, among others) and professional academic abilities (academic research, competency-based learning, among others). By 2018, both platforms were merged as a single global faculty-training platform named One Faculty by Laureate.

[28] Appendix 8: General Guidelines for the Undergraduate Faculty Training 2018.

To provide our faculty with the necessary information for the development of their scholarship activities and to get to know what it entails to be part of the UPC faculty, the university developed the Faculty Handbook[29] delivered to our professors and publicly posted online for consultation in our Integrated Quality System portal: https://sica.upc.edu.pe/en/autenticado/handbooks

c) Architectural Research and Intellectual Contribution

Faculty, both full-time and part-time are responsible for the academic training of the students by developing the program learning outcomes. The School of Architecture's faculty—comprised of 287 professors—plays a key role by using its professional and academic experience to enrich our curricular design, the syllabus development, and the program profile for incoming and graduate students, as well as research.

UPC promotes a culture of research in which faculty and students participate actively, articulating scientific research with solution proposals to real problems. There is an institutional commitment to promoting research, according to the highest national and international standards, in all the University programs, addressing the most important needs.

In this context, UPC´s Research Department develops the Annual Research Incentive Contest, nowadays in its seventh edition. The contest is addressed at all undergraduate and graduate professors (Full-time and Part-time Faculty) of all Schools, programs and academic areas of the university. It aims to select and support the best research projects that can become scientific publications accepted by any means of scientific dissemination (journal, congress or book) duly indexed in Scopus or ISI-Web of Science (WOS), before December 2019.

Concerning the Architecture faculty, in the 2018 Annual Research Incentive Contest six research projects were selected and in the 2019 edition twelve projects were selected, in both cases in the category of Researcher or First Author.

The category Researcher or First Author refers to the owner of the project who is a professor at UPC and is submitted to the Contest as researcher or principal executor of the research project and, thus, appears in the scientific publication resulting as first author or, depending on the case, as correspondent, clearly indicating their affiliation to UPC.

The research project and the resulting scientific publication may include other participants, whether UPC professors or students, of recognized local or foreign universities, which in any case will always appear as collaborators or co-authors. In such case, the economic incentive will be granted for administration only to the responsible head who is the main researcher or executor of the draft.

The incentive stipulated for this category is S /. 8,000 per project.

The participation of the School of Architecture faculty in the Annual Research Incentive Contest in the last three years is shown in Table 7.

Table 7. School of Architecture. Number of authors and co-authors, participants in the research contest 2017-2019

UPC Research Incentive Contest (Year)	Authors	Co-authors
2017	9	---
2018	6	---
2019	12	---
Total	**35**	**3**

[29] Faculty Handbook: Link

Table 8 shows the twelve research projects of the School of Architecture faculty selected in the 2019 IIV Annual Research Incentive Contest at UPC.

Table 8. IIV Annual Research Incentive Contest, School of Architecture Faculty Research Projects

Code	Author (Faculty)	Project
A-044-2019	Carrillo Thorne, Juan Diego	Lima´s Colonial Civil Furniture in the Last Third of the Seventeenth Century
A-047-2019	Casiano Arroyo, Manuel Ramón	The Use of Agent Simulation as a New Tool for Design Processes in Architectural Education
A-071-2019	Dibós De Tramontana, Daniella	Regenerating Damaged Coastal Communities
A-072-2019	Doblado Tosio, Juan Carlos	Converse and Believers. The Architecture of Postmodernism in Lima
A-086-2019	Gallardo Bravo, Joel Edward	Learning Architectural Space through Oral Language
A-098-2019	Guzmán Juárez, Miguel Ángel	Circular Buildings + Building Platforms in the Training of the North-Central Andes. Architecture, Symbols and Landscape: A Discussion of the Logics in Andean Thought
A-139-2019	López Varela, Susana	Mass public Transportation Network as a Backbone of the Metropolitan Open Space System. Lima's Subway as a Case Study
A-177-2019	Pezzia Proaño, Romina	Experimental Study in the IX Design Workshop: Differences in the conceptual approach of the project design among students who have studied elective art subjects and maintain a direct relation with it during the academic term with students who did not take those courses and have no contact with an artistic expression
A-218-2019	Sanz Rodríguez, María Gabriela	Economic and Social Impact of the Retail Food Market. The Cebiche Project Case in Lima, Peru
A-239-2019	Torres Obregón, Diana Dalila	Creative Capitalism: the Financing of Urban Informality in the Metropolitan Area of Lima
A-246-2019	Valcárcel Ruiz, Jorge Martín	Lima, Two-Headed Metropolis: Reflections on its Configuration towards the Five Hundred Years of its Foundation
C-13-2019	Herrera Polo, Pablo César	Homo Faber. Politics of the digital in Latin America

The School of Architecture faculty members have conducted research works that have been published or are in the process of being published in indexed journals. These works have been conducted as first authors or as part of teams that include other researchers. Table 9 includes the list of these research works.

Table 9. Papers in scientific journals (Scopus / Web of Science)

Year	Papers in scientific journals (Scopus / Web of Science)
2019	DREIFUSS, C. (forthcomming) Adaptaciones informales y nociones de lo público frente a la densificación urbana. In Cuadernos de Vivienda y Urbanismo. HERRERA, P., MARTIN, R. y GOMEZ, p. (2019) Resilience Design. In International Journal of Architectural Computing IJAC, 17(2). Londres: SAGE Journals. TORRES, D. (forthcomming) Derecho a la vivienda o la propiedad privada? De la política pública a la informalidad urbana en el Área Metropolitana de Lima (1996-2015). In Revista EURE. VALDIVIA, A. (forthcommming) Obstáculos epistemológicos en Urbanismo. In Cuadernos de Vivienda y Urbanismo. VALDIVIA, A. (forthcommming) Evaluación del índice de sostenibilidad urbana. In Bitácora Urbano Territorial.
2018	DREIFUSS, C., SCHREIRER, C. y JUMPA, M. (2018) Criterios de clasificación de la vivienda informal: una revisión sistemática PRISMA como herramienta para establecimiento y análisis de categorías. In Revista Indexada de textos Académicos. Volumen 10, pp. 98-103.
2017	BERNAL, M., HERRERA, P. and MARTIN, R. (2017). Crowdthinking. Collecting, Managing and operating on design information convergence. In Bernal, M., Herrera, P. and Martin, R. (Ed.), International Journal of Architectural Computing IJAC, 15(3) (pp. 185-186). London: SAGE Journals.
2016	HERRERA, P., CELANI, G. and SPERLING, D. (2016). Design with Freedom. In Pablo C. Herrera, Gabriela Celani, David Sperling (Ed.), International Journal of Architectural Computing IJAC, 14(2) (pp. 85-86). London: SAGE Journals.
2015	SPERLING, D., HERRERA, P. y SCHEEREN, R. (2015) Migratory movements of Homo Faber: Mapping Fab Labs in Latin America, pp. 405-421 En: Celani, G. (Ed.). Communications in Computer and Information Science: The Next City – 16th International Conference CAAD Futures 2015. Switzerland: Springer International Publishing. DREIFUSS, C. (2015) Sustainability through Informality. European Journal of Sustainable Development. 4(2) (pp.1-8).
2014	HERRERA, P., SPERLING, D. y BERNAL, M. (2014) Knowledge-Based Design: Representation and Manipulation within Digital Environments, pp. iii-vi. : Herrera, Pablo, Sperling, David y Bernal, Marcelo (Ed.). International Journal of Architectural Computing IJAC, vol. 12, No. 4.). Londres: Multi Science Publishing.
2010	DOBLADO, J. (2010) Casa en Sierra Morena: Huarochirí, Perú, pp. 62-63. En: ARQ, vol. 75. GARCIA, J., Saez, E. y Roch, F. (2010) La ciudad desde la casa: Ciudades espontáneas en Lima, pp. 77-116. En: revista INVI, vol. 25, No. 70.

In addition to being interested in research and broadening knowledge, our faculty has participated in international congress and symposium publications (table 10).

Table 10. Congress and international symposium publications

Year	Congress and international symposium publications, article in peer – reviewed in conference proceedings
2018	HERRERA, P. (2018). Artisans and Digital Craft in Latin America: The contribution of architects to their creativity and production. In SIGraDi 2018 | XXII Congreso SIGraDi. Technopolitics. São Carlos: University of São Paulo, Brazil. HERRERA, P., Montezuma, V., & Juárez, B. (2018). Crafts in Latin America: The contribution of the Fab Labs in the promotion of resilient communities. In FAB14 The 14th International Fab Lab Conference. Toulouse, France.
2017	BERNAL, M., HERRERA, P., & MARTIN, R. (2017). Crowdthinking. Collecting, Managing and operating on design information convergence. In Bernal, M., Herrera, P., & Martin, R. (Ed.), International Journal of Architectural Computing IJAC, 15(3) (pp. 185-186). London: SAGE Journals.
2016	HERRERA, P. (2016). Artesanía en Latinoamérica: Experiencias en el contexto de la Fabricación Digital. In SIGraDi 2016 | XX Congreso SIGraDi. Crowdthinking. Buenos Aires: Universidad de Buenos Aires, Argentina. HERRERA, P. (2016). Digital Fabrication and Revival Craft in Latin America. Alliance between designers and artisans. In 10th International Conference on Design History and Studies ICDHS. Taipei: National Taiwan University of Science and Technology. Herrera, P. (2016). Programación y fabricación digital en procesos artesanales. El caso de América del Sur. In ACSA | Cross Americas Probing Disglobal Networks. Santiago: Universidad Católica de Chile.
2015	DREIFUSS, C. (2015) Sustainability Through Informality. In: European Journal of Sustainable Development. European Center of Sustainable Development. ISSN 2239-5938 HERRERA, P. (2015) Independent Laboratories of Fabrication in Latin America. Fab11: The 11th International Fab Lab Conference (Research Paper Sessions). Cambridge: Massachusetts Institute of Technology. HERRERA, P. (2015). Matemáticas y Computación: Uso de programación visual para el desarrollo de material didáctico en un entorno educativo. XIX Congreso de la Sociedad Iberoamericana de Gráfica Digital. Florianópolis: Universidad Federal de Santa Catarina. HERRERA, P. (2015) Digital Fabrication in South America: mapping lines of action from Architecture and Urbanism. XIX Congreso de la Sociedad Iberoamericana de Gráfica Digital. Florianópolis: Universidad Federal de Santa Catarina. SPERLING, D.; HERRERA, P., & SCHEEREN, R. (2015) Migratory movements of Homo Faber: Mapping Fab Labs in Latin America. In Celani, G. (Ed.). Communications in Computer and Information Science: The Next City – 16th International Conference CAAD Futures 2015. Switzerland: Springer International Publishing. VELASCO, M. (2015) Construcción con tierra dentro del ámbito universitario. El caso de la Universidad Peruana de Ciencias Aplicadas. Earth USA 2015. Santa Fe (New Mexico): Adobe in Action.

Year	Congress and international symposium publications, article in peer – reviewed in conference proceedings
2014	DREIFUSS, C. (2014) Informality in formal contexts: case studies of self-help in upgrading formal dwellings. In: Informality: Rethinking the Urban. Mimar Sinan Fine Arts University; Duyan, Efe. Istanbul: Eastern Mediterranean Academic Research Center (DAKAN).
2013	DREIFUSS, C. (2013) Informal Settlements: A Realm for the Autonomy of the User. In: Creativity, Autonomy, Function. Mimar Sinan Fine Arts University; Duyan, Efe. Istanbul: Eastern Mediterranean Academic Research Center (DAKAN). ISBN 978-975-6264-97-3. HERRERA, P. (2013) Patrones y procedimientos en la enseñanza de la programación: De la heteroeducación a la autoeducación. In: Bernal, M. (Ed.). XVII Congreso de la Sociedad Iberoamericana de Gráfica Digital. Valparaíso: Universidade Técnica Federico Santa María. HERERA, P. (2013) Fabrication Laboratories: Problems and possibilities of implementation in Latin America. Fab9 Research. Personal Fabrication as the dawn of New Renaissance 2013, Yokohama. HERRERA, P., & JUAREZ, B. (2013) Fabrication Laboratories: Problems and possibilities of implementation in Latin America. FAB9 The 9th International Fab Lab Conference: Personal Fabrication as dawn of New Renaissance. Yokohama: Fab 9 Research Presentations. HERRERA, P. (2013) Reutilizando códigos en arquitectura como mecanismos de información y conocimiento: De la programación escrita a la visual, pp. 238-253. In: Rodriguez, D. (Ed.). Didáctica Proyectual y entornos postdigitales. Prácticas y reflexiones en escuelas de Arquitectura y Diseño. Mar del Plata: Iberoamerican Society of Digital Graphs.
2012	DREIFUSS, C. (2012) Procesos de adecuación en unidades de vivienda ya construidas. Caso de estudio: Residencial San Felipe (segunda etapa). Middle-class Housing in Perspective: From Post-war Construction to Post-millennial Urban Landscape. Milan, Italy: Politecnico Di Milano & Italian Ministry of University and Scientific Research. HERRERA, P. (2012) Reutilizando códigos como mecanismo de información y conocimiento: Programación en Arquitectura. In: D. Cardoso (Ed.), SIGraDi 2012: Forma(In)Formacion. XV Congreso de la Sociedad Iberoamericana de Gráfica Digital. Fortaleza: Universidade Federal do Ceará. Herrera, P. (2012). Perspectivas en los laboratorios de Fabricación en Latinoamérica: Experiencia y casos de estudio. In D. Cardoso (Ed.), SIGraDi 2012: Forma(In)Formacion. XV Congreso de la Sociedad Iberoamericana de Gráfica Digital. Fortaleza: Universidade Federal do Ceará.
2011	DREIFUSS, C. (2011) Huaycán: A Case Study on Growth of Spontaneous Architecture. Document presented at the Informality symposium: Re-viewing Latin American Cities of The Centre for Research in the Arts, Social Sciences and Humanities (CRASSH). Cambridge, UK: University of Cambridge. HERRERA, P. (2011) Rhinoscripting y Grasshopper a través de sus instructores: Un estudio de patrones y usos, pp. 179-182. In: M. E. Tosello (Ed.), SIGraDi 2011: Cultura Aumentada. XV Congreso de la Sociedad Iberoamericana de Gráfica Digital. Santa Fe: Universidad Nacional del Litoral. HERRERA, P. (2011) Towards an identity: Digital Fabrication in Latin America. In: Architectural Association Politics of Fabrication Symposium. Valparaíso, Chile: Pontificia Universidad Católica de Valparaíso.

Year	Congress and international symposium publications, article in peer – reviewed in conference proceedings
2010	DREIFUSS, C. (2010) Ornament as a Need in Spontaneous Architecture. Learning Aesthetics from Self-constructed Dwellings. EURAU'10: Venustas – architettura / mercato / democrazia. Naples, Italy: Facoltà di Architettura dell'Università degli Studi di Napoli "Federico II", Prima Facoltà di Architettura del Politecnico di Torino. DREIFUSS, C., & HERRERA, P. (2010) Visualización, diagramas y programación de material bibliográfico complejo, pp. 133-136: R. Villazon (Ed.) SIGraDi 2010: Disrupción, modelación y construcción: diálogos cambiantes. XIV Congreso de la Sociedad Iberoamericana de Gráfica Digital. Bogota: Universidad de los Andes, Uniandes. HERRERA, P. (2010) Tecnologías Disruptivas: Programación y Fabricación en Latinoamérica, pp. 213-216. In: R. Villazon (Ed.) SIGraDi 2010: Disrupción, modelación y construcción: diálogos cambiantes. XIV Congreso de la Sociedad Iberoamericana de Gráfica Digital. Bogota: Universidad de los Andes, Uniandes.

Furthermore, since 2010 to date, our faculty members have published 26 books or book chapters, publications in which they are the authors or co-authors as part of research teams with researchers from other universities as shown in table 11.

Table 11. Book or book chapter publications

Year	Book or book chapter publications
2018	SCHEREEN, R., HERRERA, P Y SPERLING, D. (2018) Homo Faber: Politics of the Digital in Latin America. São Carlos: Instituto de Arquitetura e Urbanismo, Universidade de São Paulo.
2016	HERRERA, P. (2016). Computation and Digital Fabrication in Latin America. In Brakke, A., Velasco R. (Eds.). XI International Symposium of Architecture: The Digital Reveal | Architecture in the Post-Digital Age. Bogotá: Universidad Piloto de Colombia. DREIFUSS, S. (2016) Arquitectura a través de la investigación. In Walter Weberhofer. El proyecto moderno en el Perú. Lima: Universidad de Lima.
2015	SPERLING, D. y HERRERA, P. (2015) Homo Faber: Digital Fabrication in Latin America. São Carlos: Instituto de Arquitetura e Urbanismo, Universidade de São Paulo.
2014	BENTÍN, J. (2014) Crónica en la Ruta de la Arquitectura. Lima: José Bentín Diez Canseco. BENTÍN, J. (2014) Enrique Seoane Ros. Una búsqueda de raíces peruanas. Lima: Universidad Nacional de Ingeniería. Burga, J. y otros (2014). Tradición y Modernidad en la Arquitectura del Mantaro. Huancayo: Universidad Continental. CIRIANI, E. (2014) Todavía la Arquitectura. Lima: Editorial Arcadia/Mediática.

Year	Book or book chapter publications
2013	DREIFUSS, C. (2013) Baños de Miraflores – 1934, pp. 35-38. En: AA.VV. Héctor Velarde. Arquitecto y humanista. Lima: Universidad de Lima, Fondo Editorial. HERRERA, P. (2013) Reutilizando códigos en arquitectura como mecanismos de información y conocimieno: De la programación Escrita a la Visual, pp. 238-253. En: Rodriguez Barros, D., Tosello, M. y Sperling, D. (2013). Didáctica proyectual y entornos postdigitales. Prácticas y reflexiones en escuelas latinoamericanas de Arquitectura y Diseño. Mar del Plata: Universidad Mar del Plata. NÓMENA ARQUITECTOS (2013) Conposiciones. 20 aproximaciones a la Arquitectura Peruana. Lima: Nómena Arquitectos.
2012	BENTÍN, J. y otros (2012) José Bentín Arquitectos: 50 años, 2006-2011. Lima: José Bentín Diez Canseco. CÓRDOVA, R. (2012) Centro histórico de Lima hoy. Problemas sociales y de conservación, PP. 36-41. En: Palmerio, G., Lombardi, A., y Montuori, P. Lima: Centro Histórico. Conocimiento y Restauración. Roma: Gangemi Editore spa. GUZMÁN, E. (2012) Historia y vestigios prehispánicos en el trazado virreinal de Lima, pp. 24-29. En: Palmerio, G., Lombardi, A. y Montuori, P. Lima: Centro Histórico. Conocimiento y Restauración. Roma: Gangemi Editore spa. HAYAKAWA, J. (2012) Restauro UNI. Breve Antología de Textos de Restauración del Patrimonio Monumental Edificado. Lima: Universidad Nacional de Ingeniería. MARTUCCELLI, E. (2012) Conversaciones con Adolfo Córdova. Lima: Universidad Nacional de Ingeniería. SORIA, J. (2012a) El nuevo rostro de la ciudad entre el siglo XIX y XX, pp. 30-35. En: Palmerio, G., Lombardi, A. y Montuori, P. Lima: Centro Histórico. Conocimiento y Restauración. Roma: Gangemi Editore spa. SORIA, J. (2012b). Técnicas constructivas tradicionales de Lima. Materiales y sistemas, pp. 106-111 En: Palmerio, G., Lombardi, A. y Montuori, P. Lima: Centro Histórico. Conocimiento y Restauración. Roma: Gangemi Editore spa.
2011	DE OLARTE, J. (2011) Manual de Edificación Sismorresistente con Tierra. Técnica Constructiva: Adobe Reforzado con Caña. Lima – Madrid: Centro de Estudios para la Edificación con Tierra y el Desarrollo Sostenible – CEETyDeS.
2010	BURGA, J. (2010) Arquitectura Vernacular peruana. Lima: Colegio de Arquitectos del Perú. CRUCHAGA, M. (2010) Fe y lealtad: 100 años de enseñanza de Arquitectura en el Perú, pp.4-5. En: 100 años formando arquitectos en el Perú. Lima: Colegio de Arquitectos del Perú. DE OLARTE, J. y BAUTISTA, C. (2010) Manual de Construcción con Adobe Mejorado. Lima: Agencia de Cooperación Internacional del Japón. HAYAKAWA, J. (2010a) Restauración en Lima. Pasos y Contrapasos. Lima: Fondo Editorial de la Universidad de San Martín de Porres.

Year	Book or book chapter publications
	HAYAKAWA, J. (2010b) Gestión del patrimonio cultural y Centros Históricos latinoamericanos. Tendiendo puentes entre el patrimonio y la ciudad. Lima: Universidad Nacional de Ingeniería. HERRERA, P. Latin America. In Neil Leach and Xu Weiguo (Eds). Machinic Processes. IV Architecture Biennial Beijing. Beijing.

On the other hand, the school has publications showing its academic activities. Since 1997, eight Retrospectivas (Retrospectives) and one portfolio have been published, including the academic work developed by the students in the courses they took.

Table 12. Publications of the School of Architecture

Title	**Year**
Un año de arquitectura 1997	1997
Facultad de Arquitectura *Retrospectiva*	1998
Retrospectiva 1999/2000	2000
Retrospectiva 2001	2001
Retrospectiva 2002/2003	2003
Retrospectiva 04/05	2005
Portafolio	2007
Retrospectiva 2006-2009	2009
Proyectos de Titulación Profesional 2001-2010	2010
Italy. Peregrinación a las fuentes de la arquitectura	2012

Within this context, the aforementioned publications are oriented to the research themes declared by the UPC Faculty of Architecture:

- Digital manufacturing and computational models in architecture
- Urbanism today and in history

This research information is also available in the School web page:

https://pregrado.upc.edu.pe/en/facultad-de-arquitectura/carrera-de-arquitectura/research/

d) Support Services Available to Students in the Program

UPC students have at their disposal the following support services:

- Freshman Psycho-pedagogical Evaluation. It is an assessment geared towards new students that aims to identify each student's level in the following areas:

  - Learning Strategies: evaluates intrinsic guidance, homework assessment, self-efficacy convictions, organizational strategies, cognitive strategies, achievement motivations

  - Vocational Area: evaluates self-confidence in decision-making, environmental control, behaviour related to the program chosen

  - Anxiety towards Evaluations Area: evaluates the concern and anxiety towards exams

- Well-being: evaluates engagement. This corresponds to a psychological state that is expressed through the sense of well-being towards a specific academic challenge related to the studies, which essentially would imply a strong commitment to their duty as a student and an intrinsic desire to contribute with something valuable to the work that is being carried out.

This assessment allows students to recognize their strengths and weaknesses at the beginning of their university life. Likewise, if some weak areas have been identified, they have the support from the academic advisory services and the UPC psycho-pedagogical guidance services.

- Academic Advisory: its purpose is to provide students with the required support to adjust themselves to university life, with its main focus on students at academic risk. At each campus where the program is offered (Monterrico, Villa, and San Miguel), there is a team of academic advisers who are full-time architecture professors. Academic advisers identify the student's risk levels based on the following criteria: the initial targeting test (which is answered by the new student), the results of their first term, the students who have already overcome the academic risk in their former term, and the students who request academic counselling.

  During the first three weeks, the academic counsellor has a first contact with the student at potential risk or at risk to establish a plan or to follow an existing plan with him. During the pedagogic counselling, the advisers and students set between two and five personal and academic goals for the term and establish a weekly calendar to follow the execution of the plan.

  According to the needs of each student, the academic adviser will refer the student to one or more support services such as tutoring (Humanities and Sciences), co-curricular psycho-pedagogical orientation workshops and Individual Counselling workshops (psychological and emotional counselling provided by the Psycho-pedagogical Orientation Area). These support services will be explained in detail in the following paragraphs.

The Educational Quality Department, through its Psycho-pedagogical Orientation Office, provides the following services to help students with their academic progress and with their well-being:

- Risk Advisory. The goal of this program is to guide and advise students at academic risk to assess their academic status and make decisions to overcome it when it implies risk of academic failure. Therefore, the academic risk advisor provides students with the guidelines for a self-diagnosis of the reasons for being at academic risk and offers strategies to overcome them.

- Vocational Orientation. The goal is to assess aptitudes, personality traits and vocational interests of undergraduate students interested in getting vocational counselling.

- Study and Learning Strategies Workshop (SLW). These workshops are designed to provide study and learning strategies and techniques after identifying the students' needs. To this end, an interview and some psychological tests about study habits and learning styles are conducted.

- Personal Development Workshop (PDW). This workshop seeks to provide a group setting to develop socio-emotional competencies such as emotional intelligence, social skills, teamwork strategies, assertive conflict resolution, emotional management, and couple and family conflict management. The development of these competencies contributes to their overall well-being, including their personal and professional development.

- Diversity and Inclusion Program. It seeks to promote the appropriate adaptation and insertion of students with a disability who decide to pursue a university program.

- Psychological Counselling. Psychological counselling is a dialogue and interaction activity, both dynamic and confidential. It is practiced by psychologists who, by means of a personal and direct relationship, seek to provide undergraduate students with socio-emotional support to ensure their holistic well-being.

- University coaching for incoming students who come to Lima from other cities or countries. This program seeks to strengthen the required personal resources for participating students, so as to take advantage of the benefits offered by UPC's Educational Model and, therefore, succeed in their adjustment to the university setting and as well as the life style of the city of Lima. Participating students are given the opportunity to be mentored and guided during their adjustment process by junior or senior students of their study program (student coach). Additionally, it allows them to be part of a support student network, with whom they share similar characteristics.

The Sciences and Humanities Departments of UPC offer the student population the possibility to participate in tutoring sessions and seminars to reinforce and complement what was learned in class.

- Language Tutoring: academic consultancies that the university offers to its students in its four campuses to reinforce what was seen in class. These consultancies are overseen by a group of faculty with specialized background in different areas of the Language courses: Remedial Language, Language Comprehension and Production 1, Language Comprehension and Production 2 and Communication.

- Language Seminars: the language seminars allow students to review and reinforce their knowledge in the undergraduate language courses topics, which are the following: Remedial Language, Language Comprehension and Production 1 and 2, and Communication. The attendance to the seminar is free. The subjects follow a schedule, which is posted on each virtual classroom section.

- Science Tutoring: it is a tutoring service that complements the theoretical and practical classes. The focus is on the cognitive aspects related to the course competences while seeking to solve doubts about Science courses topics such as: statistics, physics, maths and chemistry. Through this tutoring service, students reinforce the development of the Quantitative Reasoning competence. The tutoring could be individual or in groups (up to 3 students).

The School of Architecture offers drawing tutoring for the students to improve their knowledge and skills.

- Drawing Tutoring: this is a workshop including individual exercises related to projects worked in class. The student is able to reach the level of his/her classmates in the courses they take. It aims to support the students who need to improve their knowledge and skills regarding sketching, artistic and spatial expression control, and the use of architectural drawing tools. Moreover, each week, the workshop will aim to help the students with the topics they have been seeing through the term, and they will do practical exercises to clarify doubts to prepare them for the final evaluation of each course.

Regarding the economic benefits for UPC students, our institution, has a scholarship system to help them pay their studies:

- Honor Scholarship: it is an academic merit scholarship program for students that are in the upper third of their program that were enrolled in at least 12 credits in the former term, passing all courses, meeting the annual grade established by their program and with no disciplinary sanction. When meeting these requirements, they receive a 30%-discount benefit.

- Laureate Scholarship for Academic Excellence: Laureate and UPC have decided to give this scholarship in recognition to the outstanding academic trajectory of each program’s best student. This scholarship gives the student the opportunity to study one term in one of the Laureate universities that offers their program while being fully financially covered during that term by the university.

- Socioeconomic Scholarship: considering the economic necessity and the academic performance of the student, he/she is provided with a partial scholarship for one or two terms. It is required to maintain the upper third position within the program to renew the benefit. If the student were to obtain in parallel the Honor Scholarship, the one with more benefits shall be applied.

- Laureate Sports Scholarship for UPC outstanding athletes. This scholarship is aimed to outstanding athletes of UPC: national team or UPC team students with a high performance, enrolled in an undergraduate program and having met the requirements and conditions for the outstanding athletes defined in the Undergraduate studies regulation

Regarding labor insertion, UPC has the Career Services Department that plays a strategic role that will be detailed further on.

- Support Service for Labor Insertion. The Career Services Department plays a strategic facilitator role between the labor market and our students and graduates. Under their responsibility is the administration and management of UPC's job fair, the university's virtual employability platform, which provides access to different companies and institutions that are looking forward to contacting our students and graduates. In such case, they submit offers that are evaluated by the department to validate their integrity, after which they are included in the institutional platform for our students and alumni community to access them, depending on each case.

  Regarding its internal role and being coherent with their responsibility as facilitators with the labor market, the Career Services Department advises our students in their internship search and supports our graduates in the tough and competitive process of market labor insertion.

As mentioned in I.1.2 Learning Culture, UPC's University Life Department is in charge of managing extracurricular activities for students as part of the requirements to obtain the Bachelor's academic degree by developing four co-curricular learning outcomes: leadership, global vision, self-development and social initiative. The extracurricular activities areas are the following:

- University Volunteering
- UPC Sports
- UPC Groups
- Troupes and Clubs
- Extracurricular Workshops
- Cultural Activities Passport
- Services for the University

e) Architectural Licensing Advisor (formerly known as Intern Development Program -IDP- Educator Coordinator)

UPC´s School of Architecture will meet this requirement when the candidacy status for the program is achieved.

I.2.2 Physical Resources

Over the years, UPC's Architecture Program has grown significantly; currently, it is offered at three of the four UPC campuses:

- Monterrico, in the District of Santiago de Surco
- Villa, in the District of Chorrillos
- San Miguel, in the District of San Miguel

The academic activities and, in general, our learning culture are equally applied and developed in all of our campuses. In all of them, we have specialized spaces for architectural design, construction, and mockup workshops for students. In addition to those specialized spaces, UPC's infrastructure provides common services for all programs: Information Center, Faculty Lounge, meeting and study spaces, sports and recreational facilities, and cafeterias. Keeping this in mind, the spaces that the program offers for the development of its academic activities are as follows:

- **Theoretical classrooms:** modern and suitable spaces with board, Apple TV, projector, wireless Internet access, and all the resources required for appropriate class development. The spaces meet the infrastructure and equipment conditions required by the teaching-learning and research processes.

- **Computer labs:** they include Dell Precision T1600 Computers, EPSON multimedia projector, Makerbot 3D digital printer, HP plotter, HP scanner, screen, speakers, cisco switch, DELL P2011H 20 monitor, and white board. The capacity in these labs is of 20 people.

- **Workshop Classrooms:** Intended mainly for practical design and drawing courses, these spaces offer working tables suitable for these tasks. They also offer board, computer, Apple TV, projector, wireless Internet access, and all the resources required for correct class development.

- **Construction Workshops Facilities:** Facilities with the equipment and supporting staff required by students to learn work execution using different materials by doing. These workshops, besides work areas, offer storage and washing areas, and professor offices. They are equipped with working tables and the electrical and sanitary systems required for the task.

- **Mockup Room:** Area where students can work on their projects outside their class schedule. These spaces offer large working tables for students to work on their group and individual assignments.

  This year, within the context of our permanent search for ways to improve our infrastructure, the following changes have been made:

  - At the Monterrico Campus, the Mockup Workshop has been relocated. Initially, it was located on the first floor of Building F, with an area of 68.37 m^2 and a capacity of 34 people. At the beginning of the academic 2019-1 term, the workshop will be located on the second floor of Building G, with an area of 140.91 m^2 and a capacity of 54 people. This change represents an increase of 106% in terms of area useful for the School students' working space. This new space can be seen in Appendix 1[30], sheets AR03 and AR05.

  - At the Villa Campus, there are two new Design Workshops for the School, located on the third floor of Building H. To name those spaces, it was necessary to change the name of the design workshop H-311 to H-312. That way, the new spaces will be labeled H-311 and H-312, respectively. The Villa Campus had 8 Design Workshops, and now it has 10 Design Workshops. These new spaces and the modification of their names can be seen in Appendix 1, sheets AR11 and AR14.

  - At the San Miguel Campus, these changes have not been made because it is the newest campus and has the necessary infrastructure for the number of students who attend.

  The following are the spaces where our faculty can work on activities supplementary to teaching:

- **Digital Educational Resource Room** (RED Room). The Information Centers (Library) in all the four UPC campuses have a Digital Educational Resource Room to be exclusively used by UPC faculty members. This space is equipped with computers, printer and scanner, in addition to a group workroom. Guidance on researching physical and virtual contents, and counselling on preparing class materials and other digital educational resources is provided

- **Faculty Lounge**. It offers a working, reading, and lounging space for UPC faculty members in all the four university campuses. Here, our faculty can find a service counter, working tables, computers, lockers, lounge room, among others.

- **Meeting Rooms**. They are spaces located in the campuses where faculty members can work individually and in groups, as well as hold meetings with students.

Finally, regarding information resources that support the program's pedagogical activities, at UPC we aim at providing students with the best learning experience, which includes the digital element, both in the interaction

[30] Appendix 10: Campus UPC Facility Layout

between students and faculty and in the development of learning outcomes. Therefore, our courses may be face-to face, blended or online, which responds to the diversity of the students' needs. As a result, we make the teaching-learning process flexible, with the permanent commitment to academic excellence and quality.

At UPC, the Digital and Online Learning Department is responsible for designing and implementing innovative experiences to facilitate learning by using Information and Communication Technologies, as well as for designing blended-learning courses that use the best of online education to provide independent-learning tools and contents. This allows faculty members to offer a rewarding experience during face-to-face sessions.

This Department manages the Virtual Classroom of our courses and helps faculty members to create multimedia content as learning support. In addition, it offers the virtual space ExperTICE (http://tice.upc.edu.pe/), which allows faculty to share experiences related to technology use in the classroom.

After this pedagogical clarification, we will provide a detailed explanation about our information resources:

- **Virtual Classroom (Blackboard):** digital education platform designed to facilitate documents and materials used in face-to-face classes, as well as to provide online classes for the corresponding courses. From here, students will be able to access course video conferences, answer questionnaires, send academic assignments, visualize their grades, and keep updated with the activities developed in the courses.

- **Socrates:** online platform that allows students to review academic information—such as academic status, grade history, and schedules—and to manage different academic procedures, among others.

- **Mi UPC:** online platform that allows students and their tutors to access information regarding schedules, courses, academic terms, grades, and bookings faster.

- **Office 365:** communication and productivity platform for the entire University's students, faculty and administrative staff, which allows them to communicate "anytime, anywhere" and by using any type of device: e-mail, chat, audio and videoconference. The entire community can be interconnected by using this platform; additionally, it facilitates productivity tools and collaborative work.

- **IT Service-UPC Help Desk Service:** it provides technical support service for information technology solutions provided by UPC to students and faculty to carry out their academic and management activities. IT Service answers inquiries and provides support on any incident related to information systems, such as Socrates Intranet, Mi UPC student portal, Blackboard Virtual Classroom, Virtual Labs, Web Contact, Office 365 e-mail, UPC mobile apps, among others. The use of these information systems is regulated by the Regulations for the Use of Information Systems (SICA-REG-13)[31].

I.2.3 Financial Resources

UPC is a financially-sound institution whose main source of income is the undergraduate and graduate tuition fees. It shares its financial results publicly, through the Transparency[32] section of UPC's web site. The Accounting Department prepares the financial statements annually based on the Generally Accepted Accounting Principles (GAAP), which are then audited by PricewaterhouseCoopers (PwC).

UPC's financial management aims at guaranteeing the availability of the financial resources required for the sustainability, development and continuous improvement of its programs. To this end, the University carries out an annually budget preparation and planning process.

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

[31] Regulations for the Use of Information Systems: Link
[32] UPC financial statements. **Link**. This website is currently in Spanish.

The program deans and academic directors present and support their budget requirements for the following year to 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 for construction workshops, which are assigned with a budget that permits carrying out all of the academic activities planned for each term.

Regarding fixed assets, these are managed through an institutional process (GFA-FPA-P-04), in a centralized manner. Faculty payroll is managed by the Human Resources Department. Research funding is overseen by the UPC Research Department who manages the institutional budget for research development at the University. Furthermore, this Department provides support and advice to program faculty and students and/or graduate students who apply for external grant fund.

The general budget approved for the program is distributed among its three campuses, Monterrico, Villa and San Miguel considering the student enrollment projection per campus. For the 2019 budget, the distribution is as shown in Table 13.

Table 13. School of Architecture annual budget distribution per campus

String s/n PER	CAMPUS	Annual % assigned
0300-110010-30	Monterrico	51%
0310-110010-30	Villa	24%
0320-110010-30	San Miguel	25%
	TOTAL	100%

One of the most important expense categories considered by the Architecture program is the acquisition of materials and tools for practical sessions in the construction workshops of the three campuses, Monterrico, Villa and San Miguel. Table 14 shows the percentage that each campus invests in the acquisition of materials and tools from the budget assigned to the Construction Workshops.

The budget distribution for each campus can be reviewed in Table 14 (refer to Table 13, School of Architecture annual budget distribution per campus)

Table 14. Architecture Program Campus Budget

Architecture Campus Budget	% assigned to Construction Workshop expenses	Other expenses
Monterrico	58.77%	41.23%
Villa	63.85%	36.15%
San Miguel	63.83%	36.17%

Finally, transportation expenses due to field trips organized by the program with the students is budgeted by the Operations Department with the information provided by the School.

I.2.4 Information Resources

a) Institutional Context

The UPC Information Center 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. The Information Centers are managed by the Knowledge Management Department (KMD) and—through the development and establishment of policies and the application of standards in the management, analysis, and evaluation of collections and corporate services—offers support to the teaching-learning and research process of the university. In addition,

they contribute to the development of the information literacy learning outcome for faculty and students, as well as to the design and implementation of knowledge generation activities for the university community

Currently, the UPC library system[33] comprises four Information Centers located at the different university campuses (Monterrico, Villa, San Isidro and San Miguel) and, supported by the corporate team of the Knowledge Management Department (KMD), offers access to UPC students, faculty, and administrative staff, both physically and virtually.

The information resources management consists of a defined process with the aim to properly and timely respond to the program's needs and its courses.

All courses syllabi of the Architecture program, in the basic bibliography section and the quoted bibliographical references, have direct links to each bibliographic resource in the Information Center, providing the student with quick and easy access. The course syllabi, their bibliography and links are updated each academic term by the professors and coordinators of each academic area.

Throughout the year, the acquisition of publications can be requested to the KMD, in order to update, specialize, and enrich the collection of its academic program, as well as update the syllabi bibliography. Twice a year, the directors of the academic programs, together with the KMD, review the applications and approve the acquisition of documents (books, videos, learning kits, in digital and physical formats) according to the priorities of each program and campus.

b) Information Center Staff

To fulfill its tasks, the KMD has a matrix structure with a corporate team responsible for establishing policies, designing services, for editorial tasks and maintaining standards; and a team working at each campus mainly responsible for the Information Centers. Tables 15 and 16 detail the KMD Corporate Staff and the KMD-Information Center Staff on campus.

Table 15. KMD Corporate Staff

Position	Librarians	Other professionals	Assistants
Director of the Knowledge Management Department	1		1
Corporate team of the UPC Library System	10	2	1
Digital Platforms	1	1	
Publishing House		3	2
Total	**12**	**6**	**4**

Table 16. KMD – Information Center Staff on campus

Campus	Librarians	Assistants	Aids
Monterrico	13	13	6
San Isidro	6	5	6
Villa	5	6	3
San Miguel	5	4	4
Total	29	28	19

[33] Appendix 11: Institutional Report of Knowledge Management Department

In this context, the Architecture program has a librarian assigned by the Knowledge Management Department (KMD) who provides specialized support to the teaching and learning process, and has the following responsibilities:

- Provide 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

c) School of Architecture: Physical and Digital Resources

The Architecture program has the following specific physical and digital information resources:

- **Physical Collection:** he Information Centers have 2793 titles[34] (unduplicated book count) in total for the Architecture program, distributed as follows in table 17:

Table 17. Number of Titles and Copies

	Architecture program only	**Shared with other academic programs**	**Total**
Titles	**2650**	**143**	**2793**
Copies	**7981**	**1178**	**9159**

As mentioned earlier, the UPC library system has four Information Centers located at the four university campuses (Monterrico, Villa, San Isidro and San Miguel); our students can access their services in any of them. In this context, the book distribution per campus is as follows in Table 18:

Table 18. Physical collection distribution per campus

	Monterrico Campus	**Villa Campus**	**San Miguel Campus**	**San Isidro Campus**
Titles	2739	295	152	76
Copies	7176	1144	673	166

Appendix 13[35] presents a matrix with each program course and its bibliography related to the physical resources for the 2018 first and second term.

[34] Appendix 12: Architecture program physical information resources
[35] Appendix 13. Architecture Bibliography Report 2018

- **Digital Collection:**

  Although there are copies for course bibliography, UPC also has electronic resources: database, electronic books, electronic journals, etc. which are in the research resources portal and book chapters are digitalized according to the general bibliography referenced in the learning units. In appendix 14[36] a list of these resources for the Architecture program is presented.

  Each student of the School of Architecture has access to 41 electronics resources, of which 22 are in subscriptions[37] and 19 are open access[38], as can be seen in table 19.

  Table 19. Digital Resources: Subscriptions and Open Access – Architecture Program

Subscription			**Open Access**	
Database	**Electronic Journals**	**Reference Manager**	**Database**	**Electronic Journals**
12	8	2	12	7
Total: 22			**Total: 19**	

  UPC has 1871 electronic books for the Architecture Program: 13 of these books have Perpetual Access[39] and 1858 books are in subscription[40] (table 20).

  Table 20. E-books – Architecture Program

Perpetual Access			**Subscription**		
UPC Editorial	Springer (2015)	Springer (2018)	E-book	EBook Collection (EBSCOhost)	ProQuest Ebook Central
1	8	4	752	4	1102
Total: 13			**Total: 1858**		

d) Facilities and Services

Students of the School of Architecture have access to the following facilities and services:

- Research Resource Platform (virtual library), where the students of the School of Architecture have access to e-books, academic journals databases, specialized publications of high scientific influence, papers, data banks, bibliographic reference management tools and bibliometric analysis tools from inside the University as well as outside of it.

- Remote access to the bibliographic databases SCOPUS and Web of Science (WOS) that will allow students to review the most significant scientific publications in the different areas of knowledge.

- Access to online systems of bibliographic reference management, Mendeley and EndNote; which allow students to organize the bibliographical references by areas or research topics, as well as to copy and to insert the references directly to their document.

- The library system of the university has adequate technology for a complete information retrieval. The Catalogue can be accessed through this link, http://catalogo.upc.edu.pe, where students may

[36] Appendix 14. Digital information Resources and E-books – Architecture Program
[37] Subscription Resources: UPC pay an annual fee to the suppliers to get access to some electronic resources.
[38] Open Access Resources: Electronic resources that are freely available on the internet.
[39] Perpetual Access E-Books: E-Books that were purchased by UPC.
[40] Subscription E-Books: UPC pay an annual fee to the suppliers to get access to some E-Books.

find available collections of books, publication, videos, compact discs, case studies, papers, handouts, special materials, journals, thesis, newspapers, among others (printed and digital). It allows learning about their availability to request a loan, renewal or reservation. It also allows retrieving the contents found in the Research Resources Site and the Academic Repository. Additionally, students have access to the Academic Repository of digital theses of the Architecture academic program at UPC.

- Set of general services such as loan service; printing and photocopying services; study space, cubicle and computer booking; online librarian to advise and guide students; as well as a training program in information literacy.

I.2.5 Administrative Structure & Governance

UPC is governed by a majority independent governing board that is responsible for ensuring the academic quality, sustainability, and integrity of UPC. The Governing Board has all the powers of management and legal representation necessary for the administration of the university, with the sole exception of those matters expressly reserved for its shareholders' assembly.

The governing board appoints the CEO and Rector of the University. The Rector is the maximum authority responsible for all academic organizational structures, its governance, direction and quality assurance. The CEO is responsible for the administrative organizational structure and financial aspects of the University. There is permanent coordination between the Rector and the CEO regarding planning and budget compliance to ensure they fully adhere to the university's standards of academic quality and research.

Within the academic organizational structure there are two Vice Rectors who report directly to the Rector of the University. They are the Vice Rector for Research and Academic Affairs (VRAAR) and the Vice Rector for Planning and Academic Development (VRPAD). The Vice Rector for Research and Academic Affairs is responsible for promoting and developing research and knowledge production at the university, leading the academic programs, and overseeing the Educational Quality Department.

The organizational structure and the administrative chain of command within the Architecture School allows the program sufficient operational independence to function efficiently and operate effectively. The Architecture program has its own Dean, Program Director, Faculty, and Staff.

The Dean of the School of Architecture, Ar. Miguel Cruchaga, reports to the University Rector and is responsible for the efficient operation of the academic program. To that end, the Dean works closely with the Program Director, Ar. Mario Segami, to develop the strategic plan, prepare the annual budget, monitor retention, attrition and graduation rates, review the curricula, and evaluate progress on 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 strategic plan and objectives, the expected program enrollment, faculty and staff workload, among other requirements.

The program faculty is comprised by full-time and part-time professors in charge of training students by developing the program learning outcomes. The Architecture School's faculty plays a key role by using its professional and academic experience that enriches our curricular design, syllabus development, and program incoming student and graduate student profiles.

Full-time faculty, besides of its teaching workload, have been assigned four different roles considering their responsibilities with the School and the program. To that end the teaching workload has been adjusted to keep an efficient balance in their duties. These four roles are as follows:

- **FTF-Academic Advisors:** representing the Dean and Director of the Architecture program at each campus (Monterrico, Villa and San Miguel) with the support and supervision of the academic activities of the program and school. They hold coordination meetings once a week with the program director and the FTF-Academic Coordinators. They provide academic advising to architecture students.

- **FTF-Academic Coordinators**: they support the program director in the execution and supervision of the program or school's strategic and operation plan, emphasizing the achievement **of** the student's learning objectives and UPC's Educational Model compliance.

- **FTF-Research**: they generate and lead the research projects of the school that involve faculty and **students** in order to strengthen the University's research themes.

- **FTF-Construction Workshop**: they coordinate the development, improvement and continuous **evaluation** of the construction workshop and guarantee the standards at the three campuses with the construction workshop faculty and the program director.

Faculty, regardless of their full or part time condition, engages in decision-making by providing feedback on the teaching-learning process, policies and processes; identifies improvement opportunities for the courses; assesses student performance; and proposes improvement actions that are included in the program's Assessment Plan. They get involved through the coordination meetings held by area at least twice per term; in addition, they are part of different committees, such as the Expert Committee in an assessment process, the Accreditation Committee, or the Assessment and Curricular Change Committee. In conclusion, they are key actors in the work performed by the School and, in general, by the University.

The Mockup Workshop assistants manage the operation of these spaces and their storage rooms, assisting students, so they can make a better use of them, and managing also what the assistantship students do in these spaces. They also provide support in the different school activities, such as dissertations, defenses, conferences and end-of-term activities, and their dissemination.

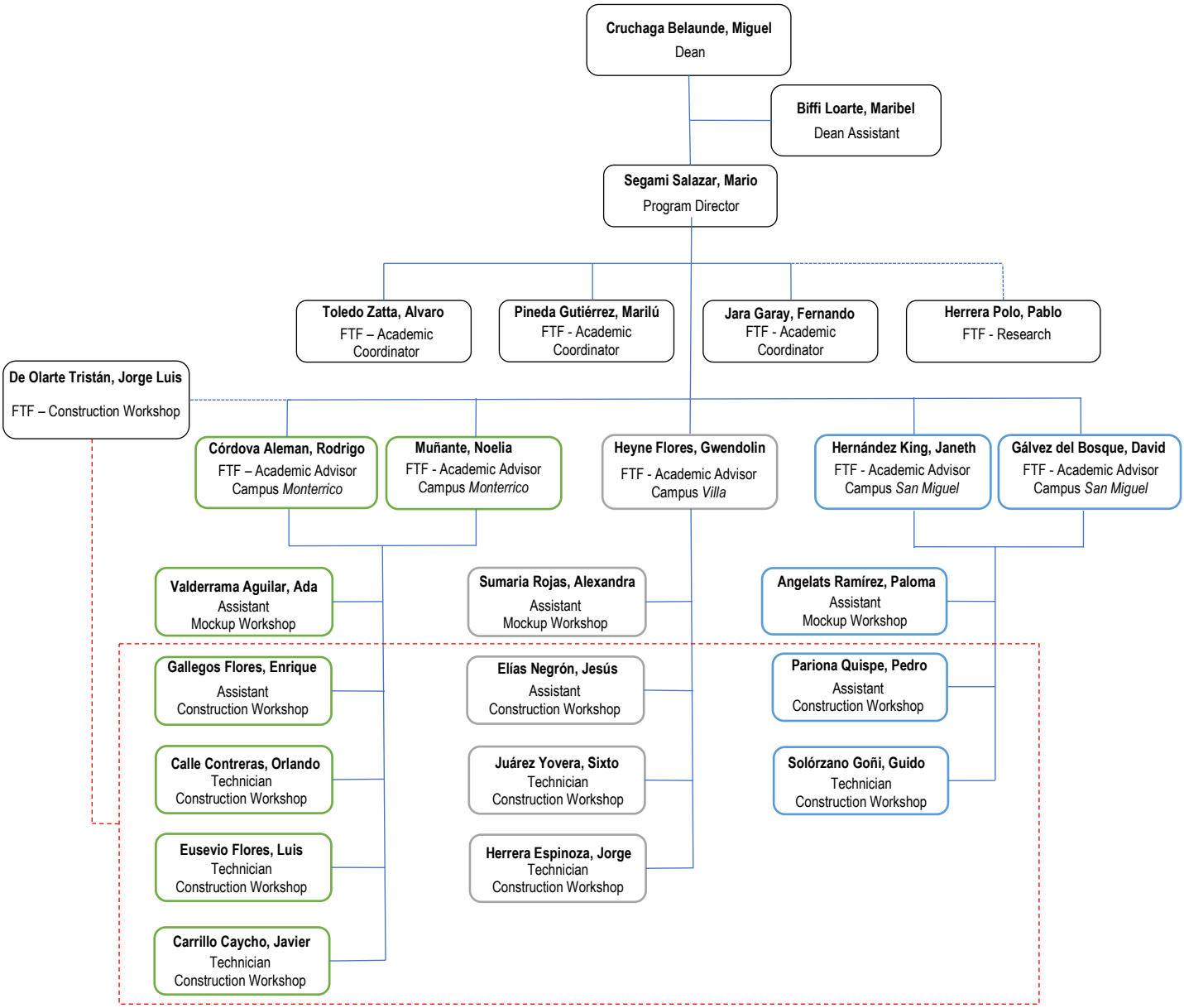
The Construction Workshop assistants are in charge of coordinating with the FTF-Construction Workshop the logistic management of the construction workshops, as well as supporting the professors and students in the development of the construction practices.

The Technicians are in charge of preparing the space where laboratory and field practices will be carried out, as well as supporting teachers and students in the development of building practices. In addition, they provide support for material storage, cleaning and order in the practice areas.

The School of Architecture students—and overall UPC students—take part in the development of our policies and decisions by providing feedback on the teaching-learning process, extracurricular activities, tutoring sessions, and counselling. This is achieved through class representative meetings (once every term), meetings with students (on student and program team initiatives), academic surveys (twice every term), and program surveys. In addition, student opinions and contributions are included in the School's decisions through the Net Promoter Score (NPS) survey results.

The UPC´s School of Architecture organizational chart is presented below.

Figure 2. School of Architecture Organizational Chart



II.1.1 Student Performance Criteria

The UPC Educational Model guarantees students a comprehensive education, based on the attainment of learning outcomes that will lead them toward the graduate student profile. This profile is composed of institutional learning outcomes and program learning outcomes developed through the program curriculum; the courses and their organization allow students to progressively achieve the level established for each learning outcome.

Program learning outcomes and curricular plan are developed upon the definition of the graduate profile. The curricular plan comprises mandatory (core and program-specific) and elective courses articulated with general competencies (institutional learning outcomes) and the program specific competencies (program learning outcomes) and it´s achievement level.

The graduate profile of the Architecture Program is defined as:

> *"Architects graduated from UPC are professionals who are able to plan, organize, design and materialize construction projects adjusted to the users' requirements, economic rationality, environment,* and *the nature of the terrain. Thanks to their comprehensive education, in addition to providing services required by society, they also articulate and promote original proposals from their understanding of the city and inhabitants, which are developed based on the use of technology, knowledge and competencies from a continuous-learning approach training."*

The Core Competencies (Institutional Learning Outcomes – ILO) are developed in every UPC academic program. These learning outcomes that enable students to be able to transform their environment as upstanding and innovative leaders are the following:

- Innovative Thinking,
- Citizenship,
- Critical Thinking,
- Written Communication,
- Oral Communication,
- Information Literacy,
- Quantitative Reasoning.

The Specific Competencies (Program Learning Outcomes – PLO), defined by each academic program, are developed through the program-specific courses. These learning outcomes comprise the abilities, knowledge, attitudes, and values common to the profession that students must meet upon completion of the program.

The Architecture program learning outcomes are:

- Critical Thinking and Graphic Representation,
- Building Practices, Technical Skills and Knowledge,
- Integrated Architectural Solutions,
- Professional Practice.

An academic analysis, based on the curricular articulation and design of all the courses of the Architecture program, was performed to define their articulation with the SPC.

a) Articulation Matrix: UPC Architecture program curriculum - NAAB's SPC

The articulation matrix presented in the PAIA has been reviewed and modified to achieve a better alignment with the SPC requirements and the course contents and characteristics. The matrix is shown in Table 6 and displays the courses they are worked on and the courses where each one of the SPCs defined by NAAB are met.

Key:

A = Ability, shows the course where the ability is developed.

U = Understanding, shows the course where understanding is developed.

Gray box= shows the courses where each SPC is met.

The matrix is showed in Table 6 and displays the courses they are worked on and the courses where each one of the SPCs defined by NAAB are met.

Key:

A = Ability, shows the course where the ability is developed.

U = Understanding, shows the course where understanding is developed.

Gray box= shows the courses where each SPC is met.

Table 21. Articulation Matrix: UPC Architecture program curriculum - NAAB's SPC

		Realm A								Realm B										Realm C			Realm D				
		Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultural Diversity and Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decisión-Making Design	Integrative Design	Stakeholder Roles In Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
		A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5
SPC Expected to have been met in preparatory education																											
SPC Met in NAAB-accredited program																											
MA618	Basic Mathematics																										
HU316	Ethics and Citizenship																										
AR174	Artistic and Spatial Expression																										
AR255	TI - Introduction to Architectural Design		A																								
MA620	Physics																										
AR01	Introduction to Architecture																						U				
MA619	Differential Calculus (Arch.)																										
AR173	Architectural Drawing	A											A														
AR256	TII - Architecture and Art		A			A																					
AR85	Architectural Analysis and Topography			A									A		A					U							
AR84	Art and Architecture from Ancient Times to the Middle Ages	A							U																		
MA621	Integral Calculus (Arch.)																										
AR213	Structural Modeling I													A													
AR257	TIII - Architecture and Surroundings		A		A	A																					
AR243	Understanding CAD	A											A														
AR212	Structural Modeling II													A													
AR87	Art and Architecture from the Middle Ages to the Renaissance								U																		
AR244	Preliminary Works																U		U								
AR260	TIV - Architecture and Functionality		A		A	A																					
AR261	Sustainability and Environment																										
HU03	Language Production and Comprehension I																										
AR215	Installations in Buildings																	U									
AR216	Simple and Reinforced Masonry																U		U								
AR39	Art and Architecture from Baroque to Art Nouveau								U																		
AR263	TV - Architecture and Environment		A		A	A				A					A	U											
AR110	Peruvian Architecture								U																		
AR162	Modern and Contemporary Art and Architecture								U																		
AR279	TVI - Architecture and Construction		A		A	A											U										
AR19	Lightweight Roofing, Formworks																U		U								
AR266	Academic Research Seminar 1																										
	Elective																										

Table 21. Articulation Matrix: UPC Architecture program curriculum - NAAB's SPC

		Realm A								Realm B										Realm C			Realm D				
		Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultural Diversity and Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decisión-Making Design	Integrative Design	Stakeholder Roles In Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
		A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5
AR161	Architectural Cultural Heritage Conservation							U			A																
AR95	Finishes/Timber Technology															U	U										
AR268	TVII - Integrative Workshop		A		A	A																A					
AR158	Urban Planning								U																		
AR269	Academic Research Seminar 2																										
	Elective																										
AR251	Urban Management								U			A															
AR270	Architectural Research			A			A																				
AR98	Special Equipment and Installations														A			U									
AR249	TVIII - Architecture and Cities		A		A	A					A																
	Elective																										
AR248	Real Estate Management																		U				U	U	U		
AR271	Professional Project Guidelines			A						A		A								U							
AR272	Urban Planning Seminar								U																		
AR250	TIX - Professional Practice Workshop		A		A	A							A								A	A					
	Elective																										
AR223	Professional Synergy																						U	U		U	U
AR252	TX - Thesis Workshop		A		A	A														U	A	A					
AR112	Theory of Architecture							U																			
	Elective																										

b) Description of the Pedagogy and Methodology Used to Address Realm C

As defined in the NAAB 2014 Conditions for accreditation, Realm C: Integrated Architectural Solutions, requires the students to demonstrate they have the ability to synthesize a wide range of variables into an integrated design solution

UPC, as established in its Educational Model, is involved in a process that goes beyond the transmission of knowledge. The University is committed to providing a comprehensive education through a teaching and learning process that allows students to reach their learning goals progressively, understood as a set of abilities, knowledge and values that will allow them to effectively face diverse real situations in their personal and professional life.

Guiding efforts to achieve the learning goals implies that the experiences are designed to offer students different ways to acquire and connect what they learn with their previous experiences and to recognize their value for their professional and personal development, by additionally providing them opportunities to implement their knowledge in various strategies and methodologies.

As it was mentioned in Learning Culture, UPC's Educational Model is based on five pedagogical principles that support the educational activities and processes: learning, student-centered learning, independent and self-reflective learning, learning in diversity with a global vision, and learning towards sustainability.

The pedagogy and methodology applied by the program to address Realm C consists of a practical work approach, where students comprehend and acquire the required SPCs' abilities and understanding, through experience by solving problems and doing exercises.

Within this framework, the program seeks for students to put into practice and develop their synthesis ability and to apply, in a project, the different variables they have learned to incorporate and solve throughout the several workshops. This is done in the following courses:

- **AR85 Architectural Analysis and Topography**

  The student's assignments must meet the following criteria:

  - Exploring architectural works and their context through the application of methodologies allowing the analysis of the architectural fact with information processing tools and topographic survey techniques.

  - Allowing students to comprehensively understand the architectural fact based on the comprehension of user needs, conceptualization, functional and formal solutions, understanding of the setting and the nature of the territory.

- **AR271 TVII Professional Project Guidelines:**

  The student's assignments must meet the following criteria:

  - Rationality: a presentation in logical order. A presentation that clearly and explicitly shows the determination process for the different parts and the corresponding conclusions.

  - Objectivity: rigorous and appropriate presentation of the information sources (bibliographic references) used to support the statements set forth.

  - Abstraction: the ability to synthetize, make a clear and simple presentation of a complex topic. Use of diagrams and graphic aids.

- **AR268 TVII Integrative Workshop** and **AR250 TIX - Professional Practice Workshop**:

  The student's assignments must meet the following criteria:

  - Focus and presentation of the design topic;
  - The research that supports it;
  - Definition of the architectural criteria used;
  - Determination of the Architectural Program;
  - Functional organization, considering the clarity of the passageways and the location of the functional packages:
  - Relation to the context; the construction and environment systems;
  - Composition and definition of the architectural spaces; Presentation means (drawings, mockups, 3D).

- **AR252 TX - Thesis Workshop Course**

  The student's assignments must meet the following criteria:

  - Students propose a personal project for presentation.
  - They establish premises and concepts that will gear their project proposal.
  - They develop a complete preliminary project.

In these courses, faculty act as catalysts in the process in which each student is individually: the generator of the knowledge necessary for his/her topic and the driver of the research and/or design process during the course, in order to make his/her work integrate the multiple variables faced. This is reinforced with the provision of certain theoretical tools for their work (mainly, the use of sources and their reference with APA).

c) A Brief Description of the Methodology to Evaluate Student's Assignments

UPC's Educational Model is based on five principles that support its educational actions and processes: competency-based learning, student-centered learning, independent and self-regulated learning, learning in diversity with a global vision, and learning towards sustainability. To evaluate students' assignments, we use quantitative and qualitative criteria. Using a successive partial submission system and evaluating both conception and scientific or technological rigor of the students' assignments, the professors value the way the student covers the different formal, functional and technological aspects, and the rigor and objectivity in the case of research, or his/her creativity contribution and coherence of his/her project.

In addition to it, faculty members also evaluate the students meeting the parameters set forth: type and number of drawings and/or sources examined, as well as meeting the deadlines. Faculty are very careful in evaluating not only the final result, but also the process.

For an appropriate evaluation of SPC-NAAB compliance in our courses, we have developed rubrics for each SPC. These rubrics are prepared consistently for each of the corresponding courses where students will be evaluated (Table 21). Currently, their dimensions have been established in response to the different aspects involved in the understanding or ability required by the SPC[41].

[41] Appendix 15: SPC-NAAB Rubric Template

In addition, different qualification levels have been defined. These qualification levels are related to our evaluation system (0 to 20 scale):

- INITIAL level, grades from 12.50 to 14.00;
- ACCEPTABLE level, grades from 14.10 to 17.00; and
- EXAMPLARY level, grades from 17.10 to 20.00.

Students who obtain an INITIAL level means meeting SPC-NAAB and therefore passing the course. Those who do not reach the initial level fail the course.

II.2.1 Institutional Accreditation:

Universidad Peruana de Ciencias Aplicadas – UPC is institutionally accredited by the Western Association of Schools and Colleges (WASC)[42] [43]since 2016.

II.2.2 Professional Degrees and Curriculum

The academic degree awarded by Universidad Peruana de Ciencias Aplicadas in the Architecture program is that of Bachelor of Architecture and the professional title of Architect. Degree award is ruled by the General Regulations for Academic Degree of Bachelor and Professional Title SICA-REG-06[44].

The Bachelor of Architecture minimum credit hour requirement, including professional studies, general studies and optional studies is 210 credits.

At this point, it is pertinent to start from the legal framework of university education in Peru; University Law No. 30220[45], in its Article 39, establishes 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, by credits and with a flexible curriculum. It can be in the face-to-face, blended or distance modalities.*
>
> *An academic credit is a measure of educational time required for students to achieve theoretical and practical learning.*
>
> *For face-to-face studies, an academic credit is defined as equivalent to a minimum of sixteen (16) teaching hours of theory classes or twice as many hours of practical classes."*

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

[42] UPC's institutional accreditation granted by WASC: Link
[43] Appendix 16: UPC institutional accreditation -WASC action letter
[44] General Regulations for the Academic Degree of bachelor and Professional Title: Link
[45] Appendix 17: Peruvian University Law N° 30220.

Credits are calculated considering face-to-face class hours (in the classroom) and differentiating the theory classes from the practical classes, in such a way that a credit equals one hour of theory class or two hours of practical classes."

In accordance with these regulatory parameters, UPC has an Hours-Credit Policy[46] that establishes the following definitions regarding the credit value of a course:

a. 16 teaching hours of scheduled theory classes[47] are equivalent to 01 credit

b. 32 teaching hours of scheduled practical classes[48] are equivalent to 01 credit

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

The Architecture program credit distribution for each one of the categories is detailed in Table 22, and in Table 23; the program curriculum details are presented and the category to which each course belongs to is identified.

Table 22. Architecture Program: *No. of credits per NAAB category*

General Studies:	45 credits
Program-specific Studies:	150 credits
Optional Studies:	15 credits

[46] UPC Hours-Credit Policy: **Link**
[47] According to UPC Hours-Credit Policy, Scheduled theory classes: in-person or virtual space for student-faculty interaction, where new knowledge, skills, and attitudes are developed.
[48] According to UPC Hours-Credit Policy, Scheduled practical classes: in-person or virtual space where the student actively participates in the application and integration of knowledge, skills, and attitudes acquired.

Table 23. Architecture program curriculum

			Hours		Credits		Total		NAAB Categories
Term	Code	Course	Theory	Practice	Cred. x Th	Cred. x Ph	Hours	Credits	
1	HU316	Ethics and Citizenship	16	32	1	1	48	2	General
1	AR174	Artistic and Spatial Expression	80	64	5	2	144	7	General
1	MA618	Basic Mathematics	112	-	7	-	112	7	General
1	AR255	TI - Introduction to Architectural Design	32	64	2	2	96	4	Program-specific
2	MA619	Differential Calculus	64	-	4	-	64	4	General
2	AR173	Architectural Drawing	32	64	2	2	96	4	Program-specific
2	MA620	Physics	80	-	5	-	80	5	General
2	AR01	Introduction to Architecture[49]	32	32	2	1	64	3	Program-specific
2	AR256	TII - Architecture and Art	48	96	3	3	144	6	Program-specific
3	AR85	Architectural Analysis and Topography	32	32	2	1	64	3	Program-specific
3	AR84	Art and Architecture from Ancient Times to the Middle Ages	64	-	4	-	64	4	Program-specific
3	MA621	Integral Calculus	64	-	4	-	64	4	General
3	AR213	Structural Modeling I[50]	48	32	3	1	80	4	Program-specific
3	AR257	TIII - Architecture and Surroundings	48	96	3	3	144	6	Program-specific
4	AR87	Art and Architecture from the Middle Ages to the Renaissance	64	-	4	-	64	4	Program-specific
4	AR243	Understanding CAD[51]	-	96	-	3	96	3	Program-specific
4	AR212	Structural Modeling II[52]	48	32	3	1	80	4	Program-specific
4	AR244	Preliminary Works	32	32	2	1	64	3	Program-specific
4	AR260	TIV - Architecture and Functionality	16	128	1	4	144	5	Program-specific
4	AR261	Sustainability and Environment	64	-	4	-	64	4	General
5	AR216	Simple and Reinforced Masonry	32	32	2	1	64	3	Program-specific
5	AR39	Art and Architecture from Baroque to Art Nouveau	64	-	4	-	64	4	Program-specific
5	HU03	Language Production and Comprehension I	32	64	2	2	96	4	General
5	AR215	Installations in Buildings	32	32	2	1	64	3	Program-specific
5	AR263	TV - Architecture and Environment	48	96	3	3	144	6	Program-specific

[49] Blended Course
[50] Blended Course
[51] Blended Course
[52] Blended Course

			Hours		Credits		Total		NAAB Categories
Term	Code	Course	Theory	Practice	Cred. x Th	Cred. x Ph	Hours	Credits	
6	AR110	Peruvian Architecture	64	-	4	-	64	4	Program-specific
6	AR162	Modern and Contemporary Art and Architecture	64	-	4	-	64	4	Program-specific
6	AR19	Lightweight Roofing, Formworks	32	32	2	1	64	3	Program-specific
6	AR279	TVI - Architecture and Construction	16	128	1	4	144	5	Program-specific
6	AR266	Academic Research Seminar 1	64	-	4	-	64	4	General
6		Program Electives	48	-	3	-	48	3	Optional
7	AR95	Finishes/Timber Technology	32	32	2	1	64	3	Program-specific
7	AR161	Architectural Cultural Heritage Conservation	48	-	3	-	48	3	Program-specific
7	AR268	TVII - Integrative Workshop	80	32	5	1	112	6	Program-specific
7	AR158	Urban Planning	32	64	2	2	96	4	Program-specific
7	AR269	Academic Research Seminar 2	64	-	4	-	64	4	General
7		Program Electives	48	-	3	-	48	3	Optional
8	AR270	Architectural Research	64	32	4	1	96	5	Program-specific
8	AR251	Urban Management	32	32	2	1	64	3	Program-specific
8	AR98	Special Equipment and Installations	32	32	2	1	64	3	Program-specific
8	AR249	TVIII - Architecture and Cities	96	32	6	1	128	7	Program-specific
8		Program Electives	48	-	3	-	48	3	Optional
9	AR248	Real Estate Management	48	-	3	-	48	3	Program-specific
9	AR271	Professional Project Guidelines	64	-	4	-	64	4	Program-specific
9	AR272	Urban Planning Seminar	64	-	4	-	64	4	Program-specific
9	AR250	TIX - Professional Practice Workshop	96	32	6	1	128	7	Program-specific
9		Program Electives	48	-	3	-	48	3	Optional
10	AR223	Professional Synergy	-	64	0	2	64	2	Program-specific
10	AR252	TX - Thesis Workshop	96	32	6	1	128	7	Program-specific
10	AR112	Theory of Architecture	64	-	4	-	64	4	Program-specific
10		Program Electives	48	-	3	-	48	3	Optional
							4,144	**210**	

Appendix 18 includes the list of elective courses[53].

[53] Appendix 18: Architecture Program. Elective courses.

II.3 Evaluation of Preparatory Education

a. Admission Policy and Process

UPC has an Admission Policy for Undergraduate programs (SICA-PYL-08)[54] that establishes the rules and conditions that regulate the admission process in order to select those applicants who meet the requirements established by the national legislation and UPC for admission to the university.

The process defines two admission methods: ordinary and extraordinary:

- Ordinary. The ordinary admission process to UPC (general admission) takes place through a public contest. The public contest consists of a knowledge exam as the main mandatory process (admission exam), which constitutes a comprehensive evaluation of the applicants.

- Extraordinary. The extraordinary admission process occurs through the following extraordinary methods, which are described in detail in the Admission Policy for Undergraduate programs (SICA-PYL-08):

    - International Agreement

    - Preferred Selection

    - External Transfer and Academic Degree and Professional Title Exemption

    - PRONABEC Programs: Beca 18

In the case of being admitted through the Preferred Selection method, it should be noted that the first and second place, by merit order, of secondary-level educational institutions of each region are exempted from the allocation of offers of admission of the Admission Process, and they are admitted according to the provisions in the current legislation and UPC's procedures regarding the Preferred Selection method.

The comprehensive evaluation allows students admitted to the university—according to the score achieved—to access program-specific courses in the first term. In case their score was not sufficient, they must take previous remedial courses in mathematics, language and/or physics.

Additionally, incoming students of the Architecture program take the Vocational Aptitude Test, which consists of a theoretical evaluation[55] and a practical evaluation[56]. Those whose score does not reach the minimum required must take the remedial architectural courses[57]: AR206 Architectural Vocational Aptitude Workshop and AR242 Introduction to Sketching.

b. If the program relies on the preparatory educational experience to ensure that admitted students have met certain SPC.

Not applicable. Our program aims at developing the diverse learning outcomes in the teaching-learning process and through its courses. Therefore, students are not required to have acquired any of these learning outcomes in their previous education.

[54] Admission Policy for Undergraduate Programs: **Link**
[55] Appendix 19: Vocational Aptitude Test - Theoretical Part
[56] Appendix 20: Vocational Aptitude Test - Practical Part
[57] Appendix 21: Leveling course description

c. The evaluation of baccalaureate-degree is clearly articulated in the admissions process

Policies and procedures related to admission are clear and transparent for all the participants, and are coherent with the program's mission, expected results, and strategies.

As mentioned before, the design of a UPC program is based on the graduate student profile definition, which shows us the kind of professional students will become and the learning outcomes they will attain. The curriculum is designed based on this profile, which, in turn, will guide us to define an incoming student profile.

This information is shared by UPC publicly, in a clear and transparent manner, in the program's web site[58] showing the Architecture program incoming and graduate student profiles.

The Architecture program incoming student profile defines the characteristics required by applicants interested in the program:

- They must show imagination, talent for organizing spaces and constructive/structural sense.
- They must be highly empathic to be able to understand and assimilate the client's project particularities and the context in which it will be built.
- They must have a sharp general curiosity for the nature of things so as to improve their work with the wide array of options to consider in every challenge. This curiosity must expand to all cultural and creativity aspects.

In turn, the graduate student profile defines the following characteristics for students graduated from the School of Architecture:

- They are able to plan, organize, design and materialize constructions adjusted to the users' requirements, economic rationality, environment, and the nature of the terrain.
- They are able to articulate and promote original proposals from their understanding of the city and inhabitants, which are developed based on the use of technology, knowledge and competencies from a continuous-learning approach training.

Admission process requirements, as well as the admission policy, are public and can be found on the university web site.

The general admission process evaluates student skills and knowledge in the Language, Physics and Mathematics areas. Likewise, the Vocational Aptitude Test taken by architecture applicants—which is formed by a theory part [59] and a practical part[60]—serves to validate the program incoming student profile.

These evaluations will determine—as stated in the admission policy—if students must take remedial courses before starting first-term courses.

This is stated in a transparent manner in our web site, under the admission section:

> **"Step 2: Assess your potential**
>
> You will receive your comprehensive evaluation date, a mandatory test to define if you may start studying your program-specific courses or if you need to strengthen some particular area beforehand.
>
> **Did you pass the comprehensive evaluation?**
>
> If you pass the comprehensive evaluation, and according to the grade obtained, you may be exonerated from the remedial courses in your program"
>
> Source: https://pregrado.upc.edu.pe/admision/modalidades-de-ingreso-upc-2019-1#RG

[58] Architecture program: Incoming profile **Link** and graduate profile. **Link**
[59] Appendix 19: Vocational Aptitude Test - Theoretical Part
[60] Appendix 20: Vocational Aptitude Test - Practical Part

II.4 Public Information

II.4.1 Statement on NAAB-Accredited Degrees

UPC´s Bachelor of Architecture Program is committed to complying with this requirement when the candidacy status for the program is achieved, as required in the NAAB 2014 Conditions for Accreditation.

II.4.2 Access to NAAB Conditions and Procedures

UPC´s Bachelor of Architecture Program is committed to complying with this requirement when the candidacy status for the program is achieved, as required in the NAAB 2014 Conditions for Accreditation

II.4.3 Access to Career Development Information

UPC has a Career Services Office that plays a strategic role as a facilitator between the labor market and our undergraduate and graduate students. It is responsible for administrating and managing the UPC Job Bank[61]—the university's virtual employability platform—which provides access to different companies and institutions that seek to contact our students and graduate students. For this purpose, they present offers that are evaluated by the Office to validate their seriousness. Once approved, they are incorporated into the institution's platform, so they can be accessed by our student or graduate student community, as applicable.

Furthermore, it should be noted that, in the Office's facilitating role, our platform includes strategic alliances with other job banks, incorporating them within the same platform and expanding the array of opportunities for our students and graduate students.

Regarding its internal role, and being consistent with its responsibility as a facilitator with the labor market, the Office advises our students on searching pre-professional internships, and supports our graduate students in the difficult and competitive process of placement in the labor market.

Consequently, this activity permits the development of strategic alliances with both the public and private sectors, as it is a point of contact and confluence of interests between supply and demand.

As stated in the Student Handbook[62]:

> *"UPC Employment Opportunities Office assists students in the search of pre-professional internships and supports alumni in the difficult and competitive process of inclusion in the labor market. To meet the mission, it puts you in contact with the institutions and companies in the country. In addition, it combines their competencies with the ones companies require, thus enabling a successful professional career.*
>
> *(…)*
>
> *The Employment Opportunities Office is available to students and graduates through University Services at each site (…).*
>
> *The University Services offices are located at:*
>
> - *Monterrico Site 1st floor Building J*
> - *San Isidro Site 1st floor Building A • San Miguel Site 1st floor Building C*
> - *Villa Site 1st floor Building B"*

[61] UPC Job Bank: Link (currently in Spanish)
[62] Student Handbook: Link

II.4.4 Public Access to APRs and VTRs

Not applicable yet. UPC will make APR and VTRs available once we are in that accreditation stage of the process, as required in the NAAB 2014 Conditions for Accreditation.

II.4.5 Architect Registration Examination (ARE) Pass Rates

Not applicable. It will be published when any UPC student applies for the registration examination**.**

II.4.6 Admissions and Advising

The complete admission process information can be found in the University web site, via the following links:

- **Admission policy**[63]: https://sica.upc.edu.pe/sites/sica.upc.edu.pe/files/SICA-PYL-08%20v3%20Admission%20Policy%20for%20Undergraduate%20Programs.pdf
- **Admission modalities**: https://www.upc.edu.pe/admision/admision-2019-1/modalidades-de-ingreso-upc-2019-1/
- **Admission process schedule**: https://www.upc.edu.pe/admision/admision-2019-1/modalidades-de-ingreso-upc-2019-1/
- **Admission exam topics:** https://www.upc.edu.pe/admision/admision-2019-1/temario-de-examenes-de-admision-2019-1/#
- **UPC Scholarships:** (for applicants) https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-internas-postulantes/

II.4.7 Student Financial Information

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:

- **Tuition policy and benefits**: https://www.upc.edu.pe/servicios/becas-creditos-y-cobranzas/politica-de-pensiones/
- **Tuition:** https://www.upc.edu.pe/transparencia-upc/pensiones-y-tarifas/pensiones-pregrado/
- **Fees:** https://www.upc.edu.pe/transparencia-upc/pensiones-y-tarifas/tarifas-pregrado/
- **UPC Scholarships:** (for applicants) https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-internas-postulantes/

  (for students) https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-internas-alumnos/
- **External Scholarships:** https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-externas-postulantes/
- **Reclassification**[64]: https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-internas-postulantes/#recategorizacion%20socioeconomica

  https://www.upc.edu.pe/admision/becas-y-financiamiento/becas-internas-postulantes/#recategorizacion%20hermano
- **External Financing agreements**: https://www.upc.edu.pe/servicios/becas-creditos-y-cobranzas/programa-de-financiamiento-externo/

[63] Admission Policy for Undergraduate Programs. Link
[64] Reclassification: places students on a new payment scale as a result of a socio-economic evaluation. This scale will be valid until the end of the program

In addition, the Student Handbook[65], 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:

- Scholarships and financing
- Tuition and fees

Tuition, fees, financial aids and scholarships area regulated by UPC´s Administrative-Academic Regulations[66] available online in the following link: https://sica.upc.edu.pe/en/publico/upc-regulations, providing free access to the public in general.

[65] Student Handbook: Link
[66] Administrative Academic Regulations: Link

APR – Section 4 – Supplemental Material

The program shall provide a number of documents for review by the visiting team.

Rather than being appended to the APR, they are to be provided by hyperlink or stored on an easily accessible digital portal (e.g., Dropbox).

- Descriptions of all courses offered within the curriculum of the NAAB-accredited degree program. The program must use the template available on the NAAB website.
  - Appendix 21: Leveling course description
- Studio Culture Policy
  - UPC Academic Quality Policy and Objectives: Link
  - UPC Educational Model: Link
  - UPC Academic Freedom Policy: Link
- Self-Assessment Policies and Objectives
  - UPC Academic Quality Policy and Objectives: Link
  - SICA'S Quality Manual: Link
- Policies on academic integrity for students (e.g., cheating and plagiarism)
  - Student Disciplinary Regulations: Link
- Information resources policies including collection development
  - Appendix 11: Institutional Report - Knowledge Management Department
- The institution's policies and procedures relative to EEO/AA for faculty, staff, and students
  - UPC´s Policy on Diversity and Non Discrimination: Link
- The institution's policy regarding human resources development opportunities, such as sabbatical, research leave, and scholarly achievements.
  - Faculty Handbook: Link
- The policies, procedures, and criteria for faculty appointment, promotion, and when applicable, tenure.
  - Faculty Regime Regulations: Link
- Videos attached:
  - Video Make a wish Peru - UPC
  - Video UPC Timeline
  - Video Architectural Design Workshops Tour 2018-2 - Monterrico Campus
  - Video Architectural Design Workshops Tour 2018-2 - Monterrico Campus
  - Video Architectural Design Workshops Tour 2018-2 - Monterrico Campus