STUDENT ACHIEVEMENT
REPORT
2021

**UNIVERSIDAD PERUANA DE CIENCIAS APLICADAS
(UPC)**

INSTITUTIONAL OVERVIEW

Created in 1993 in Lima, Peru, Universidad Peruana de Ciencias Aplicadas (UPC) is a private innovative and research oriented comprehensive educational institution, aimed at providing higher education programs, at the undergraduate and graduate levels, which stand out for their academic quality and alignment with labor market demands. It is dedicated to offering students a rigorous, meaningful, and integral educational experience that promotes scientific and technological research as well as cultural, intellectual, and artistic enrichment.

UPC's mission: "To educate upstanding and innovative leaders with a global vision who will transform Peru" is the foundational commitment that guides and inspires all actions within the institution.

UPC's position at national and international rankings between 2017-2021 has improved continuously. UPC is recognized for its academic quality, international competitiveness, research impact and results, and innovation. For eight consecutive years it has been named the most international university in Peru by *América Economía National Ranking 2021* which also distinguishes UPC as number one in Accreditation. UPC has 4 stars in the QS Stars Rating and has 6 of the 8 categories with 5 stars. UPC is the youngest university in Latin America to achieve 4 stars in QS Stars Rating. It ranks 5th nationally in the QS Latin America Ranking. In terms of research, SCIMAGO Institutions Ranking has UPC in the 7th position among Peruvian universities.

Currently, UPC offers 64 bachelor's and 35 master's degree programs through its 13 Schools: Architecture, Business, Communications, Contemporary Arts, Design, Economics, Education, Engineering, Health Sciences, Hospitality and Tourism Administration, Human Sciences, Law, and Psychology. In addition, UPC's Graduate School offers non-degree programs such as certificates, short courses, and in-house specialty programs. Tables 1 and 2 show the number, modality, and longevity of UPC's undergraduate and graduate degree programs.

Table 1. UPC's Undergraduate Programs (Modality and Longevity)

SCHOOL	PROGRAM	LEVEL	MODALITY	YEAR IMPLEMENTED
Architecture	1. Architecture	Traditional Undergraduate	Onsite	1994
Business	2. Accounting and Administration	Traditional Undergraduate	Onsite	1996
	3. Administration and Agribusiness	Traditional Undergraduate	Onsite	2008
	4. Administration	Traditional Undergraduate	Onsite	2022
	5. Administration and Finance	Traditional Undergraduate	Onsite	1996
	6. Administration and Human Resources	Traditional Undergraduate	Onsite	2005

SCHOOL	PROGRAM	LEVEL	MODALITY	YEAR IMPLEMENTED
	7. Administration and International Business	Traditional Undergraduate	Onsite	2003
	8. Administration and Marketing	Traditional Undergraduate	Onsite	1996
	9. Sports Administration and Business	Traditional Undergraduate	Onsite	2011
	10. Entrepreneurial Administration and Management	Traditional Undergraduate	Onsite	2012
Communications	11. Audiovisual Communication and Interactive Media	Traditional Undergraduate	Onsite	2009
	12. Communication and Corporate Image	Traditional Undergraduate	Onsite	2008
	13. Communication and Photography	Traditional Undergraduate	Onsite	2018
	14. Communication and Journalism	Traditional Undergraduate	Onsite	1994
	15. Communication and Marketing	Traditional Undergraduate	Onsite	2008
	16. Communication and Publicity	Traditional Undergraduate	Onsite	1994
Contemporary Arts	17. Music	Traditional Undergraduate	Onsite	2010
	18. Performing Arts	Traditional Undergraduate	Onsite	2017
Design	19. Fashion Design and Management	Traditional Undergraduate	Onsite	2012
	20. Professional Graphic Design	Traditional Undergraduate	Onsite	2011
	21. Professional Interior Design	Traditional Undergraduate	Onsite	2011
	22. Industrial Design	Traditional Undergraduate	Onsite	2021
Economics	23. Economics and Finance	Traditional Undergraduate	Onsite	2003
	24. Economics and International Business	Traditional Undergraduate	Onsite	2005
	25. Managerial Economics	Traditional Undergraduate	Onsite	2012
	26. Economics and Public Policy	Traditional Undergraduate	Onsite	2005
	27. Economics and Development	Traditional Undergraduate	Onsite	2009
	28. Political Science	Traditional Undergraduate	Onsite	2020
Education	29. Educational and Pedagogical Management	Traditional Undergraduate	Onsite	2012

SCHOOL	PROGRAM	LEVEL	MODALITY	YEAR IMPLEMENTED
Engineering	30. Business Management Engineering	Traditional Undergraduate	Onsite	2011
	31. Civil Engineering	Traditional Undergraduate	Onsite	1994
	32. Computer Science	Traditional Undergraduate	Onsite	2012
	33. Electronic Engineering	Traditional Undergraduate	Onsite	1994
	34. Environmental Engineering and Management	Traditional Undergraduate	Onsite	2017
	35. Industrial Engineering	Traditional Undergraduate	Onsite	1994
	36. Information Systems Engineering	Traditional Undergraduate	Onsite	1994
	37. Mechatronics Engineering	Traditional Undergraduate	Onsite	2012
	38. Telecommunications and Network Engineering	Traditional Undergraduate	Onsite	2006
	39. Mining Management Engineering	Traditional Undergraduate	Onsite	2012
	40. Software Engineering	Traditional Undergraduate	Onsite	2004
	41. Biomedical Engineering	Traditional Undergraduate	Onsite	2022
Health Sciences	42. Dentistry	Traditional Undergraduate	Onsite	2008
	43. Medicine	Traditional Undergraduate	Onsite	2007
	44. Veterinary Medicine	Traditional Undergraduate	Onsite	2018
	45. Nutrition and Dietetics	Traditional Undergraduate	Onsite	2006
	46. Physical Therapy	Traditional Undergraduate	Onsite	2009
	47. Physical Activity and Sport Sciences	Traditional Undergraduate	Onsite	2021
	48. Biology	Traditional Undergraduate	Onsite	2022
Hospitality and Tourism Administration	49. Hospitality and Business Administration	Traditional Undergraduate	Onsite	2006
	50. Gastronomy and Culinary Management	Traditional Undergraduate	Onsite	2015
	51. Tourism and Business Administration	Traditional Undergraduate	Onsite	2009
Human Sciences	52. Professional Translation and Interpretation	Traditional Undergraduate	Onsite	2011

SCHOOL	PROGRAM	LEVEL	MODALITY	YEAR IMPLEMENTED
Psychology	53. Psychology	Traditional Undergraduate	Onsite	2006
Law	54. Law	Traditional Undergraduate	Onsite	1998
	55. International Relations	Traditional Undergraduate	Onsite	2020
Business	56. Accounting	Working Adult	Onsite	2013
	57. Banking and Financial Administration	Working Adult	Onsite	2009
	58. Business Administration	Working Adult	Onsite	2005
	Entrepreneurial Administration and Management	Working Adult	Onsite	2012
	59. Marketing	Working Adult	Onsite	2005
	60. International Business	Working Adult	Onsite	2005
	Administration and Human Resources	Working Adult	Onsite	2017
	61. Human Resources Administration	Working Adult	Onsite	2017
Hospitality and Tourism Administration	62. Hospitality and Tourism Administration	Working Adult	Onsite	2009
Engineering	Civil Engineering	Working Adult	Onsite	2012
	Industrial Engineering	Working Adult	Onsite	2008
	63. Network and Communications Engineering	Working Adult	Onsite	2011
	64. Systems Engineering	Working Adult	Onsite	1996

Table 2. UPC's Master's Degree Programs (Modality and Longevity)

No.	PROGRAM	MODALITY	YEAR IMPLEMENTED
1	Senior Management MBA	Onsite	1997
2	Strategic Management of Human Capital	Onsite	2013
		Distance Education	2019
3	Executive MBA	Onsite	2008
4	MBA	Onsite	2010
5	International MBA	Distance Education	2011
6	Health MBA	Onsite	2009
7	MBA for Masters	Onsite	2007
8	E-MBA	Distance Education	2008

No.	PROGRAM	MODALITY	YEAR IMPLEMENTED
9	Administration and Project Management	Onsite	2009
		Distance Education	2011
10	Senior Management and Leadership	Onsite	2012
11	Corporate Communications	Distance Education	2012
12	Public Administration	Onsite	2011
		Distance Education	2019
13	Corporate Finance	Onsite	2011
14	Corporate Law	Onsite	2001
15	Marketing and Sales Management	Onsite	2012
16	Dietetics and Nutrition Management and Pedagogy	Onsite	2011
17	Systems and Information Technology Management	Onsite	2011
18	Operations Management and Logistics	Onsite	2003
		Distance Education	2011
19	Construction Management	Onsite	2006
		Distance Education	2013
20	Mining Management	Onsite	2012
		Distance Education	2021
21	Data Science	Onsite	2020
22	Communication and Digital Marketing	Onsite	2020
23	Digital Business Transformation	Onsite	2020
24	Education	Onsite	2020
		Distance Education	2021
25	Cybersecurity and Information Management	Onsite	2020
26	Environmental Management	Onsite	2020
27	Health Psychology and Lifestyles	Onsite	2020
28	Translation	Onsite	2020
29	Entrepreneurship and Innovation Management	Onsite	2021
30	Economics	Onsite	2021
31	Road Engineering	Onsite	2021
32	Information Systems and Technology	Onsite	2021
33	Taxation	Onsite	2021
34	Public Procurement	Onsite	2021
35	Architecture	Onsite	2021

UPC STUDENT ACHIEVEMENT REPORT STRUCTURE
2021

UPC's Student Achievement Report presents the main results for 2021 regarding the following areas:

I.	Students' Achievements
II.	Student Learning Results
III.	Academic Excellency Group Results
IV.	University Life Results
V.	Internationality Results
VI.	Employability Results
VII.	Alumni Results
VIII.	Retention, Graduation and Enrollment Results
IX.	Completion Results within 100% and 150%
X.	Faculty Qualifications and Distribution by Work Status
XI.	Research Results
XII.	Social Responsibility Impact
XIII.	NPS UPC Results

I.   Students' Achievements

School of Hospitality and Tourism Administration

a) Students of the Tourism and Business Administration program won third place in the tourism challenge of the Inspira Festival organized by PROMPERÚ

The In-challenge is one of the many activities that took place at Inspira, a festival organized by PROMPERÚ that fosters the internationalization of Peruvian creativity and innovation.

This contest, which seeks to disseminate Peruvian creativity and innovation worldwide, was held from May 24 to 28, 2021. Diana Castro Rivera and Alejandro Vera Cuadros, both students of the Tourism and Business Administration program took part in the contest and won third place in the tourism challenge "How does technology contribute to sound management and optimization of resources in micro, small and medium-sized tourism, and community enterprises?"

Additional information is available at: (link).

Figure 1. Diana Castro and Alejandro Vera, students of the Tourism and Business Administration program and winners of the tourism challenge "How does technology contribute to sound management and optimization of resources in micro, small and medium-sized tourism, and community enterprises?", Inspira Festival 2021.

b) Students of the School of Hospitality and Tourism Administration participated as mentors in the Junior Waiter Volunteer Program

The volunteer program "*Capacitación y Entrenamiento a Camareros Junior*" [Junior Waiters Training and Coaching] was held from September to November 2021. This training program focuses on youth labor insertion and was designed by UPC's School of Hospitality and Tourism Administration.

Ten students from the three different programs of the School took part in the volunteer program as mentors and had the opportunity to provide online training to 20 youth aged between 17 and 20 from communal homes, who are living in areas of poverty and extreme poverty located in the district of Villa María del Triunfo, Lima.

The Municipality of Lima, a strategic partner, manages a database of vulnerable groups, and offered job opportunities in restaurants, cafeterias, and the like to those who successfully completed the training.

Table 3 presents the list of the students who participated as mentors in the Junior Waiter Volunteer Program 2021.

Table 3. Students of the School of Hospitality and Tourism who participated as mentors (2021)

Students	Term	Program
Rosalyn Diana Aguilar Quispe	6	Tourism and Business Administration
Diana Morales Terrones	5	Tourism and Business Administration
Katerina Maria Loveday Gonzales Orbegoso	3	Gastronomy and Culinary Management
Karol Gabriela Donaires Zuta	3	Gastronomy and Culinary Management
Melisa Lisseth Gonzales Torres	9	Hospitality and Business Administration
Luciana Claudia Del Águila De la Torre Ugarte	7	Hospitality and Business Administration
Fátima Llana Balmelli Linares	7	Hospitality and Business Administration
Kelly Lisset Anchante Palomino	6	Hospitality and Business Administration
Victor Elias Gonzales Facho	5	Hospitality and Business Administration
Fernando José Viralta Anduze	6	Hospitality and Business Administration

Figure 2. Youth trained within the framework of the "Junior Waiters Training and Coaching" volunteer program 2021.

c) Students and graduates of the Hospitality and Business Administration program participated in the 2nd Latin American Congress on Hospitality and Culinary Research (CLIHR)

UPC's School of Hospitality and Tourism Administration, in collaboration with CETT Barcelona School of Tourism, Hospitality and Gastronomy (Universitat de Barcelona) and the School of Tourism and Hospitality Business Management of the Universidad Externado de Colombia organized the second edition of the Latin American Congress on Hospitality and Culinary Research, which was held online in November 2021.

Table 4. presents the research papers submitted and their authors.

Table 4. Students and Graduates of the School of Hospitality and Tourism Administration who submitted research papers in the 2nd Latin American Congress on Hospitality and Culinary Research (2021)

Participants	Research Paper
Fiorella Gabrielli (student)	*Sostenibilidad ambiental en hoteles y COVID-19* [Environmental Sustainability in Hotels during the COVID-19 Pandemic]
Danithza del Pino (graduate) Ana Sofía Matías (graduate)	*Elementos culturales y realización de eventos corporativos en hoteles* [Cultural Elements and the Organization of Corporate Events in Hotels]
María Pia Castro (graduate) María Pia Cebreros (graduate)	*Gestión de crisis en el sector hotelero peruano en el contexto COVID-19* [Crisis Management in the Peruvian Hospitality Sector in the Context of COVID-19 Pandemic]

It is worth noting that these three research papers were selected by the CLIHR 2021 Scientific Committee to be presented in the researcher sessions, after undergoing a rigorous double-blind evaluation process. These were the only papers submitted by students and graduates and admitted to the Congress.

Additional information is available at: (link).

Figure 3. Poster of the 2nd Latin American Congress on Hospitality and Culinary Research (CLIHR).

d) Students from the Hospitality and Business Administration program took part in the STR Student Market Study Competition

The STR Student Market Study Competition puts emphasis on teamwork, analytical expertise, critical thinking, and presentation skills. STR, founded in 1985, provides premium data benchmarking, analytics, and marketplace insights for the global hospitality industry (link).

Zaleria Zambrano, Tatiana Galdos and Fabrizio Moreno, all students of the Hospitality and Business Administration program, took part in the international competition organized by STR and CONPEHT, in which they were provided with the opportunity to present a behavioral analysis of the Premium hotel market in Lima from 2016 to 2021.

The competition was held online on November 17, 2021. The school's team won third place among all Spanish-speaking universities at international level and was the only Peruvian team at the event.

School of Economics

a) First-year students of the Political Science program launched Social Media Sites named *"Cocina Política"* [Political Kitchen] at Facebook, Instagram, and LinkedIn

Within the context of the presidential election year in Peru, first-year students of the Political Science program launched in January 2021, social media sites called "*Cocina Política*" [Political Kitchen] with the aim to provide citizens accurate, relevant, and comprehensive information about national political context.

Through this social media sites, students promoted debates between congressional candidates, which allowed many citizens to cast a more informed vote. After the electoral period, they have kept these sites up-to-date with the participation of experts and politicians to analyze Peru's political context from an objective and didactic point of view.

Alexis Revilla, Luis Saona, and Camila Lopez, students of the Political Science program, lead the project.

In less than a year, these sites have more than 1,000 followers, due to the important content shared and active dissemination performed. (Source: link)

Figure 4. *Cocina Política* Social Media Sites (2021).

b) Graduates of UPC's Economics and Finance program won the 2020-2021 Renzo Rossini Award for Research in Economics and Finance held by the BCRP

The *Banco Central de Reserva del Perú* [Central Reserve Bank of Peru] (BCRP) held the 2020-2021 Renzo Rossini Award for Research in Economics and Finance to promote and encourage undergraduate and graduate research in economics and finance. On June 11, 2021, upon evaluation of the research works, the Jury awarded the prize to graduates of UPC's Economics and Finance program, who submitted the following papers: (Source: link).

- First place: "*Análisis de riesgos competitivos de la duración de la tasa de política monetaria en el Perú*" [Competitive Risk Analysis of the Duration of Peru's Monetary Policy Rate] by Teresa Tipula (UPC).

- Second place: "*Incertidumbre económica política e inversión: Un indicador basado en el EPU y en el uso de Big Data*" [Political and Economic Uncertainty and Investment: An indicator Based on EPU and the Use of Big Data] by Daniel Yon (UPC).

- Third place: "*Un análisis de la efectividad de las herramientas macro prudenciales aplicadas en el Perú durante el periodo 2011-2019*" [An Analysis of the Effectiveness of Macro Prudential Tools Applied in Peru During the 2011-2019 Period] by Vivian Izaguirre (UPC).

Additional information is available at: (link).

Figure 5. Award-winning graduates of UPC's Economics and Finance program.

c) UPC students won third place at the 2021 CFA Institute Research Challenge

The CFA Institute Research Challenge is an annual global competition that provides university students with hands-on mentoring and intensive training in financial analysis and professional ethics. Students are

tested on their analytical, valuation, report writing, and presentation skills. They gain real-world experience as they assume the role of a research analyst (source: link).

On February 25, the finals of the 2021 Global Investment Research Challenge Peru was held online. The team of UPC's School of Economics that won third place was made up of the following students: Brandon Bardales Torres, Fátima Durán Echeverría, Miluska Mocada Paredes, Sebastí Santa María Nieri, and Sebastiam Murillo Tangherlini.

Additional information is available at: (link).

School of Communications

a) Graduates of the Communication and Marketing program published their research paper in the International Journal of Emerging Technologies in Learning (iJET)

Graduates Alejandro Mujica Luna and Esteban Villanueva Urcia and Professor Luis Loderios Zubiria, advisor and co-author, developed the following research paper: "Micro-learning Platforms Brand Awareness Using Social Media Marketing and Customer Brand Engagement," which was accepted and published on Monday, May 17, 2021, in the International Journal of Emerging Technologies in Learning (iJET), a Q2 journal.

The paper seeks to analyze the impact of social media marketing on microlearning platforms Customer Brand Engagement and Brand Awareness. The sample consisted of 220 students on microlearning platforms that use social networks in educational institutions.

Figure 6. Alejandro Mujica Luna and Esteban Villanueva Urcia.

This research paper is available at: (link).

b) Graduate of the Communication and Marketing program obtained the SILVER EFFIE Award in the "low budget" category, with the Protecta Security, SOAT MASCOTAS campaign in 2021

The Effie® Awards are recognized by advertisers and agencies worldwide as the most outstanding award in the industry, which recognize all forms of marketing that contribute to the success of a brand. Since

1968, being awarded an Effie® has become a global symbol of achievement.

In August 2021, graduate Gianella Alexandra Casella Azañedo, won the SILVER EFFIE Award in the "low budget" category, with the Protecta Security, SOAT MASCOTAS campaign.

Figure 7. Gianella Alexandra Casella Azañedo, winner of the SILVER EFFIE Award.

c) Student of the Communication and Marketing program obtained a scholarship to participate in COFIDE's Talent Program

In October 2021, Mónica Andrea Olarte Núñez obtained a scholarship to participate in COFIDE's Talent Program. This program was held by COFIDE Bank and UPC's Graduate School. The program provides young university students with development opportunities and entry-level positions within the institution to strengthen their skills, retain talent, and foster best practices in the program, which contribute to advancing the institution and its human capital.

d) Students of the Communication and Publicity program published their papers in journals and graduates participated in research congresses

From January to December 2021, the research papers of students were published in international and national indexed academic journals. The research papers were developed by students and faculty co-authors. In addition, graduates of the program participated in international research congresses as main speakers.

Table 5. List of publications in research journals from January to December presented by Students

PAPERS IN RESEARCH JOURNALS		
PUBLICATION	**AUTHORS**	**PUBLICATION DATE**
"*Amas de casa como storytellers y anunciantes de Instagram*" [Housewives as Instagram Storytellers and Advertisers] Research available at: link	**Student:** Daniela Plaza Berríos **Faculty co-author:** Eliana Gallardo Echenique	01-11-21
"*La creación del rito: análisis semiótico de la protesta sindical a través de la red social Twitter durante el estado de pandemia*" [The Creation of Ritual: Semiotic Analysis of Union Protest on the Social Network Twitter during the COVID-19 Pandemic] Research available at: link	**Faculty:** Eduardo Yalán Dongo	05-26-21
"The Perception of Lima Women about the Representation of 'Real Woman' in the Advertising Discourse of Beauty and Feminine Care Products" Research available at: link	**Student:** Ximena Alomía Díaz **Faculty co-author:** Francisco Arbaiza	07-01-21
"*La actividad del fandom del fenómeno transmedia de Marvel: un análisis comparativo de las comunidades digitales peruanas en tiempos de pandemia*" [Fandom Activity within the Context of the Marvel Transmedia Phenomenon: a Comparative Analysis of Peruvian Online Communities during the COVID-19 Pandemic] Research available at: link	**Faculty:** Francisco Arbaiza	07-01-21
"Percepción de 'gamers' universitarios de la UPC sobre el 'in-game advertising' de Adidas en el videojuego FIFA20" [Perception of University Gamers of UPC on Adidas "In-game Advertising" in the FIFA20 video game] Research available at: link	**Student:** Renzo Rodríguez Ramirez **Faculty:** Francisco Arbaiza and Eduardo Yalán	07-15-21
"Gender Role Stereotypes as an Ethical Resource in the Peruvian Advertising Discourse" Research available at: link	**Student:** Ninowska-Camila Carbajal-Obando **Faculty co-author:** Melina Mezarina and Eliana Gallardo Echenique	From December 2 to 4, 2021
"The Brand-cause Fit in the Advertising Campaign for Sprite's #YouAreNotAlone" Research available at: link	**Student:** Claudia Cachay-Marín **Faculty co-author:** Francisco Arbaiza and Eliana Gallardo Echenique	From December 2 to 4, 2021
"Chicha Music as an Advertising Resource to Arouse Emotions in the Consumer" Research available at: link	**Student:** Ana-Kelly Duran-Palomino Co-authors: Francisco Arbaiza and Eliana Gallardo Echenique	From December 2 to 4, 2021

Table 6. List of research congresses where graduates have presented their papers

PARTICIPATIONS IN RESEARCH CONGRESSES		
CONGRESS	**PARTICIPANTS**	**DATE**
Brand integration in NBA2K18 Virtual World Additional information is available at: link	**Graduate:** Luis Felipe Ríos **Faculty co-author:** Eliana Gallardo Echenique and José Eduardo Mejía Perea	From June 23 to 26, 2021
The Role of Fitness Influencers in Building Brand Credibility through Distorted Imagery of Healthy living on Instagram Additional information is available at: link	**Graduate:** Diego Aguilar **Faculty co-author:** Francisco Arbaiza	From June 23 to 26, 2021

e) Students of the Communication and Publicity program took part in the *Tacu Tacu* Challenge, an internal competition on creativity in advertising

UPC's School of Communications and its Communication and Publicity program signed a strategic agreement with the Municipality of Lima to support entrepreneurs of the "*Lima Crea Contigo*" [Lima creates with you] program, an initiative that seeks to promote innovative and sustainable ventures that generate benefits for the citizens.

The *Tacu Tacu Challenge* sought to help said ventures in developing a proposal around their brand's graphic identity and digital strategy for the management of their social networks, developed by students of the Communication and Publicity program. The *Tacu Tacu Challenge* allowed students of the program to challenge their own creativity.

From October to December 2021, the program worked with 13 Peruvian ventures from the Business Incubator of the Municipality of Lima ("*Lima Crea Contigo*") and one venture from UPC's *Protagonistas del Cambio* Program*,* as clients. Briefs were developed for each venture.

A video with additional information of *Tacu Tacu* Challenge is available at: (link).

f) Students of the Communication and Photography program participated in the photographic project "Photo Camp Nat Geo" in Bolivia

Sharon Gonzales Parra and Kevin Palacios Fuentes, students of the Communication and Photography program, participated in the photographic project "Photo Camp Nat Geo" in Lomerío, Santa Cruz, Bolivia. Over the course of two months, the students gave photography lessons to the community, by applying principles of participatory photography.

This activity took place between August and October 2021 and was supported by the Universidad NUR de Santa Cruz (link) and the University of East Anglia (link) in England.

Figure 8. Students participating in the project in Bolivia.

g)   Graduate of the Audiovisual Communication and Interactive Media program was awarded in the GIMFA Awards @gimfawards in Brazil for the short film "*Uniendo Corazones*"

The GIMFA (Gralha International Monthly Film Awards) is a monthly film award that aims to promote the best of world cinema. The films are watched internally by qualified judges from the cinematographic environment. (Source: link).

In March 2021, Estefano Rodriguez Chug, graduate of the Audiovisual Communication and Interactive Media program, directed the short film "*Uniendo Corazones*" [Matching Hearts], which was part of the Official Selection of the GIMFA Awards @gimfawards of Brazil, representing Peru. (Source: link). After a rigorous selection process, and as a result of the extraordinary direction of Estefano Rodriguez, the film was awarded in the category "best actor of short film" in recognition of the performance of actor Sebastian Ramos. (Source: link).

Figura 9. Estefano Rodriguez, graduate and winner of the GIMFA Award for Best Actor.

h) Graduate project of the Audiovisual Communication and Interactive Media program won Best First-Time Director at the New Jersey Film Awards

The New Jersey Film Awards is a monthly film and screenplay competition and a platform to showcase the work of independent filmmakers worldwide. (Source: link)

In March 2021, Estefano Rodriguez Chug, graduate of the Audiovisual Communication and Interactive. Media program, director of the short film *"Uniendo Corazones"* [Matching Hearts], won Best First-Time Director. (Source: link).

Figure 10. *Uniendo Corazones* Short Film, Winner at New Jersey Film Awards 2021 in the category "Best First-Time Director"

i) Graduate of the Audiovisual Communication and Interactive Media program took part in the #CCDConecta2021

CCD Conecta is a program developed by the City Council of Guadalajara, Mexico, with the aim to boost recruitment and entrepreneurship in the audiovisual creative industry (Source: link). This program is oriented to students, graduates, and entrepreneurs of the creative and digital industry.

The program comprises master classes and workshops about the global audiovisual industry, as well as recruitment interviews with studios from Mexico and Latin America. During this program, participants can meet with industry experts to receive advising that enable them to foster their employability potential. Additional information about CCD Conecta 2021 is available at the following (link).

Sophia Jamalie Magallanes Morales, graduate of the Audiovisual Communication and Interactive Media program, took part in this event providing portfolio reviews of stories as part of the #CCDConecta2021 in June 2021. (Source: link).

j) Short film directed by graduate of the Audiovisual Communication and Interactive Media program was selected to participate in the Golden Goblet Award competition

The Golden Goblet Award is the most prestigious prize awarded to competing films at the Shanghai International Film Festival (SIFF). This is one of the largest film festivals in East Asia. (Source: link)

The short film "Alba" directed by Elva Arrieta Tabuzo, graduate of the Audiovisual Communication and Interactive Media program, was selected to participate in the Golden Goblet Award: Short Films of the 24th Shanghai International Film Festival, which took place from June 11 to 20, 2021. (Source: link)

Figure 11. Alba Film, winner at the Shanghai International Film Festival (SIFF) 2021.

k) Graduate of the Audiovisual Communication and Interactive Media program was invited as an exhibitor at the Ajayu International Animation Festival

This festival aims to showcase artistic expression in animation through cultural exchange in animated productions and other cultural manifestations from the Andean world. Ajayu is recognized and awarded by the Peruvian Ministry of Culture.

As part of the series of "*Conversatorios Animados*" [Animated Conversations], the team of "ALBA," a project directed by Elva Arrieta Tabuzo, graduate of the Audiovisual Communication and Interactive Media program, was invited on April 27, 2021 to share details of the animated short film, winner of the Peruvian category during the 5th Festival. (Source: link).

"Alba" tells the story of a creative girl who is eager to play, but problems arise in her family due to gender stereotypes.

Figura 12. Alba Film Poster at the "*Conversatorios Animados*" 2021 Event.

l) **Graduate project of the Audiovisual Communication and Interactive Media program won Best Animated Short Film at the Hellbender Festival**
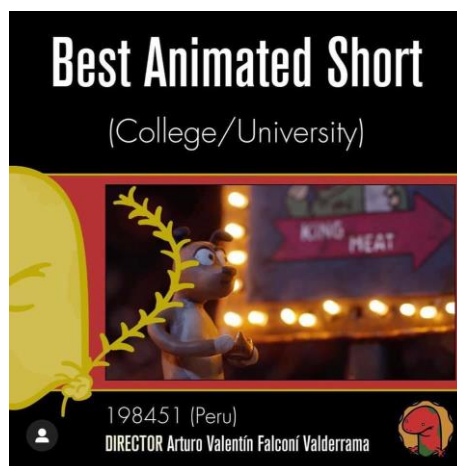
The Hellbender Student Film Festival seeks to showcase the best high school, undergraduate, and graduate student films and video works from Missouri, United States, and the world. (Source: link).

On April 26, 2021, the project 198451 directed by Arturo Falconi Valderrama, graduate of the Audiovisual Communication and Interactive Media program, won Best Animated Short Film at the Hellbender Festival in Missouri. (Source: link).

Figure 13. "198451 Animated Short Film", winner at the Hellbender Student Film Festival.

m) Graduate project of the Audiovisual Communication and Interactive Media program was part of the official selection of the Busan International Kids and Youth Film Festival (BIKY)

BIKY is the only youth festival in Korea that has provided a venue for young audience to communicate through various films from all over the world. BIKY has one competition called "Ready Action" for films directed by young directors who are under 18.

The remaining sections are non-competition for professionals. For professionals, BIKY presents the "Heart-on Award". (Source: link)

Elva Arrieta Tabuzo, graduate of the Audiovisual Communication and Interactive Media program, who directed "ALBA," was part of the official selection of films in the Busan International Kids and Youth Film Festival @biky_filmfest on July 5, 2021. (Source: link)

Figure 14. Alba Film Poster, BIKY Festival 2021

n) Graduate project of the Audiovisual Communication and Interactive Media program was part of the official selection of the 25th L.A. Shorts International Film Festival

L.A. Shorts International Film Festival ranks among the most prestigious and largest short film festivals in the world. The festival is accredited by the Academy of Motion Pictures Arts & Sciences, the British Academy of Film and Television Arts, the Academy of Canadian Cinema and Television, and The Academy of Motion Picture Arts and Sciences of Spain. (Source: link)

In July 2021, Elva Arrieta Tabuzo, graduate of the Audiovisual Communication and Interactive Media program, who directed "ALBA," was part of the official selection of the 25th L.A. Shorts International Film Festival. (Source: link)

Figure 15. Alba Film Poster, LA Shorts Festival 2021.

o) Graduate of the Audiovisual Communication and Interactive Media program took part in a project nominated for the 2020 Gabo Award

The Gabo Award was established by the Gabo Foundation, since 2012, to promote better journalism; the pursuit of excellence; innovation; rigor in the treatment of facts and ethical consistency by journalists and media that work and publish regularly in Spanish and Portuguese targeting different audiences in the Americas, Spain, and Portugal.

The Gabo Foundation, created in 1995 by the journalist and Nobel Prize for Literature winner Gabriel García Márquez (link) organizes the "Gabo award" which is considered the most prestigious award in journalism in Ibero-America. (Source: link)

On January 7, 2021, "*Recolectores de cuerpos*" [Body Collectors], a project in which UPC graduate Carlos Hidalgo took part, was nominated for the 2020 Gabo Award in the Image category.

"*Recolectores de cuerpos*" [Body Collectors] is an audiovisual report that makes a night tour with those who collect the corpses of those who died of COVID-19 in Lima, Peru.

The list of projects nominated for the Gabo Award 2021 is available at: (link).

Additional information of this audiovisual report is available at: (link).

Figure 16. *Recolectores de Cuerpo*, nominated in the Gabo Award 2021.

p) Graduate of the Audiovisual Communication and Interactive Media program participated as moderator in a talk organized by the Canadian Embassy in Peru and Bolivia

In July 2021, the Canadian Embassy in Peru and Bolivia organized a talk on contemporary Canadian cinema: "*¿A dónde envío mi película*?" [Where do I send my movie?], in which Carlos Antonio Salvatierra Gonzalez, graduate of the Audiovisual Communication and Interactive Media program, took part as moderator of the event. (Source: link)

Additional information is available at: (link)
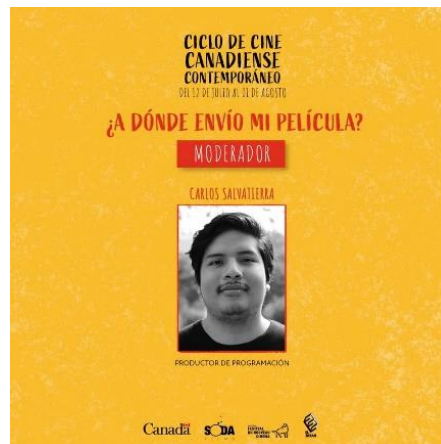
Figure 17. Canadian Contemporary Cinema Talk - Carlos Salvatierra, UPC graduate, participated as a moderator of the event.

q) Graduate of the Audiovisual Communication and Interactive Media program participated as speaker at a conference organized by DAFO

In April 2021, Carlos Antonio Salvatierra Gonzalez, graduate of the Audiovisual Communication and Interactive Media program, participated as speaker in the online seminar on "*Consumo y demanda del contenido audiovisual en Perú*" [Consumption and Demand for Audiovisual Content in Peru], organized by the Department of Audiovisual, Phonography and New Media (DAFO, in Spanish), of the Ministry of Culture. (Source: link)

Figure 18. Carlos Salvatierra, UPC Graduate and speaker in the Consumption and Demand for Audiovisual Content in Peru Online Seminar 2021

r) IAPA Awards: Honorable Mention for students of UPC's Communication and Journalism program

The Inter American Press Association (IAPA) awarded an honorable mention in the category of 2021 University Journalism for the piece titled "*El arte de sobrevivir en la pandemia*" [The Art of Surviving the Pandemic], authored by Adriana Mayor, Fiorella Gallardo, Hanna Kristel Su Wing and Sidney Cornejo, students of UPC's Communication and Journalism program.

Through a journalistic approach, the students were able to capture the harsh situation in which the members of the Shipibo-Konibo community of Cantagallo lived through the COVID-19 pandemic by showcasing their capacity to face current challenges, using technology and art as an alternative.

The journalistic piece was developed in the Informative Journalism Workshop course, during which students work on the Punto Seguido magazine. The students developed the subject by taking into account the social, political, and cultural scope that this proposal offered at an informative level, which are relevant aspects to be developed in a report.

Additional information is available at: (link).

Figure 19. Adriana Mayor, Fiorella Gallardo, Hanna Su Wing and Sidney Cornejo, UPC students and authors of "*El arte de sobrevivir en la pandemia*"

s) Students of the Communication and Corporate Image program won the "*Excelencia Igualitaria Jóvenes*" [Youth Excellence in Equality] category of the 2021 Scotiabank Equality Award

Scotiabank launched the second edition of its Equality Award in March 2021, an initiative that recognizes the best and most innovative practices that generate a positive impact on reducing the wage and gender gap and foster equal opportunities in Peru. On this occasion, Scotiabank launched the "Youth Excellence in Equality" category for university students.

Among the 46 groups registered in said category, six were grand finalists, and among them four were from UPC. The Warmis App and Mujer y Modelo [Woman & Model] initiatives were among the winners. (Source: [link](#))

- **Initiative: Warmis App**
  UPC Participants: Ana Valencia, Diana Escalante, Marcelo Chavez and Marcelo Musso.

- **Initiative: Mujer & Modelo [Woman & Model]**
  UPC Participant: Brenda Aldana. This group also includes members from other universities.

- **Initiative: Yo también puedo [I, too, can]**
  UPC Participants: Alejandro Saavedra and María Alejandra Morán

- **Initiative: Icónica [Iconic]**
  UPC Participants: María Fernanda Bracamonte, Esteban Guerrero and Godwin Santander

Additional information is available at: ([link](#)).

t) Students of the Communication and Corporate Image program took part in the "*Publifestival* 2021"

On June 29, 2021, Juan José Arce, Anthony Carhuaz and Dante Zhou, students of the Communication and Corporate Image program, developed the "*Botikit de ideas*" [Bag of Ideas] and "*APP-Miembros de Mesa*" [APP-Electoral Officers] projects, which received the awards for "Best Social Value in Project or Social Action" and "Best Effectiveness in Mobile Application", respectively, in the Publifestival 2021".

"Publifestival", organized by *Gala Acción Social,* is the international festival of social advertising, recognized for representing a great advertising gala and the meeting point for companies and professionals from the world of communication with a common interest: Marketing with a Cause or Social Advertising (source: link).

The "*Botikit de Ideas"* has been designed for the United Nations Children's Fund (UNICEF) in coordination with the *Etapa de Vida Adolescente [*Adolescent and Young Life Stage area] and Joven EVAJ [Adolescent and Youth Life] of the Peruvian Ministry of Health (MINSA). The strategic proposal has developed a system for digital self-production of communicative materials on adolescent health.

At present, the Communications area of the *Etapa de Vida Adolescente and Joven EVAJ* is using and disseminating the materials produced and stored in the "Botikit of ideas" project.

The "*APP-Miembros de Mesa*" was designed exclusively for the Peruvian Extraordinary Congressional Elections of the year 2020 by order of the National Office of Electoral Processes (ONPE). Here, videos and other electoral training materials for electoral officers were transformed into a fun and easy-to-use mobile application, which included a test to measure the level of learning and a section that included the use of augmented reality in interaction with the physical information booklet. With this, the app became more dynamic and helped the electoral officers to have all the information at hand, regarding their duties during the installation, voting and counting stages. It should be noted that the application was the first experience of using this type of mobile technology applied in citizen electoral training promoted by a government in Latin America (source: link).

Additional information is available at: (link).

Figure 20. UPC students, members of the "*Botik de Ideas*" project.

School of Business

a) UPC won first place at the 2021 CFA Society Peru Ethics Challenge

The CFA (Chartered Financial Analyst) Society is an organization of investment professionals worldwide that promotes the integrity of financial and capital markets and contributes to the development of investment professionals (source: link).

The second edition of the CFA Ethics Challenge competition was held on August 17, 2021. The team of the Administration and Finance program won first place. The winning team was made up of the following students: Waldir Duran, Stephanie Pautrat, Rocio Ramirez, Carlos Trelles and Felix Vasquez.

Fourteen teams of Peru's main universities took part in the competition, in which the participants had to solve a professional ethical dilemma guided by the codes of ethics of the CFA Institute of New York.

The team of UPC's School of Economics was made of the following students: Gabriela Espinar (Economics and International Business), Aixa Arce (Managerial Economics), Ricardo Suarez (Economics and International Business) and Karla Orellano (Economics and International Business), who won third place in the competition.

Additional information is available at: (link).

Figure 21. UPC Students won the First Place at the 2021 CFA Society Peru Ethics Challenge.

b) Graduate of the Administration and Marketing program published a book titled "*Es Puro Marketing*" [It's Pure Marketing] for sale on Amazon

In February 2021, Raul Diaz Miranda, graduate of the Administration and Marketing program, published a book titled "*Es Puro Marketing*" [It's Pure Marketing] for sale on Amazon.

The book delves into how marketing can be used as a powerful tool that will help people fulfill their dreams and excel in any aspect of their lives.

Additional information is available at: (link).
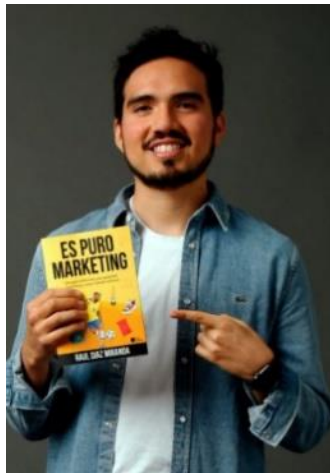
Figure 22. Graduate Raul Diaz Miranda, author of "*Es Puro Marketing*" [It's Pure Marketing].

c) Fabrizio Canosi Visalot, fifth-term student of the Administration and Marketing program, was awarded the first international sponsorship agreement for a Peruvian soccer team

Micro-Star International, Co., Ltd (MSI) is a Taiwanese multinational IT company that designs, develops and supplies computer equipment and related products and services, including notebook computers, motherboards, graphics cards and all-in-one PCs, among others. The company is renowned in the gaming and eSports world.

In July 2021, Fabrizio Canosi Visalot, fifth-term student of the Administration and Marketing program, obtained the first international sponsorship agreement for a Peruvian soccer team, the esports Cienciano of Cusco and its main sponsor, a Taiwanese technology company.

Additional information is available at: (link)

Figure 23. Student Fabrizio Canoci, manager of the first international sponsorship agreement for a Peruvian soccer team.

d) Working Adult Undergraduate students of the Marketing program won the Effie College Award with a project developed for Mibanco

Inspired by the Effie Awards Competition and the CollegiateEffie USA, the Effie College seeks to foster participation of students and provide them with the opportunity to work with real briefs and requirements that pose real marketing challenges.

Each team must think and act as a group of marketing and communications professionals so as to propose a strategic, creative and potentially effective solution to the challenge proposed by the brands participating in the program.

María Atúncar Ortiz and Laura Reyes Vásquez, students of the Working Adult Undergraduate Marketing program, won the Effie College Award 2021 with a project developed for Mibanco.

Figure 24. Poster with the names of the winners of the Effie College Award 2021.

e) Graduates of the Administration and Marketing program were awarded scholarships to pursue postgraduate studies

- Adriana Freundt Taramona was awarded a scholarship to study an MBA at Michigan Ross, on August 8, 2021.

- Elina Chang Espinoza was awarded a scholarship to study an MBA at Queen's University (Smith program) in Canada in November 2021.

- Graduate Melany Vargas Salas was awarded a Social Innovation scholarship for the amount of USD 40,000 to study at Babson College (Boston, United States), after a successful presentation on a social impact project in December 2021.

Additional information is available at: (link).

f) Song by UPC student Sofía Carlos wins the "Music and Volunteering" contest

The song "*Ser solidario, ser humano*" [Being Supportive, Being Human] by Sofía Carlos, student of the Administration and Marketing program, was selected in the "Music and Volunteering" contest organized by the Municipality of Lima in 2020.

Sofia who, in 2018, spent her Sundays as a Siloé volunteer at the Children's Hospital and, additionally, taught English in Huancayo as part of the Maikikita Quykuway project, was inspired by both experiences to write the song.

Figure 25. Sofía Carlos, student of the Administration and Marketing program and winner of the "Music and Volunteering" contest 2021.

g) Students of the Administration and Marketing program obtained an Erasmus scholarship to study in Slovakia for one term

The Erasmus+ Program agreement between UPC and the Pan-European University was signed in January 2020 and was the first to be signed between both institutions. This way, UPC strengthens its position by participating in the Erasmus+ program to offer benefits to students who wish to study abroad, in cooperation with European institutions.

The International Office announced that Valeria Fátima Miranda Vega and Luis Carlo Guillén Estabridis, both students of the Administration and Marketing program, obtained Erasmus+ scholarships to study for one term at the Pan-European University, a private institution located in Bratislava, capital of Slovakia.

h) Valeria and Alessia Palacios, students of the Administration and International Business program qualified for the South American Junior and Senior Games of RIO 2021 in the women's coxless pairs – freestyle category

The South American Games, also called ODESUR Games, are a series of sports events organized every four years in which the federations affiliated to the South American Sports Organization (ODESUR) participate.

All South-American countries and some Central-American and Caribbean countries participate in this multi-sport event. The South American Games include Olympic sports, such as athletics and swimming, but it also includes other sports that are not in the Olympic Games program, such as Bowling and Karate. Valeria and Alessia Palacios, students of the Administration and International Business program, classified by passing the rigorous tests with official times, judges and the supervision of the Peruvian Rowing Federation during three days of elimination rounds and finals. (Source: link).

Figure 26. Valeria and Alessia Palacios during the competition.

i) Students of the Sports Administration and Business program moderated discussion panels on gender equity in sports

UPC signed an agreement with the Women's Soccer League - LF7. Said agreement is part of UPC's commitment to promote gender equity and safe spaces in sports and physical activity to positively impact society.

As part of the strategies implemented to extend the scope of the programmed activities, UPC included students of the Sports Business and Administration program as moderators of the different discussion panels, so that they can have first-hand experiences upon entering the national sports industry.

Additional information is available at: (link).

Figure 27. Students of the program who participated in the Equity in Gender at Sport panel.

j)   UPC's Accounting and Administration program held its third edition of the World Accounting Week (WAW)

In September 2021, topics on accounting and business trends were discussed during the "2021 World Accounting Week (WAW) Conferences".

The overall theme was "Corporate Sustainability" – that is, good corporate policies, ecological issues, and overall employee health.

Various national and international representatives were invited to attend the event, which was attended by a total of 400 people, including students, graduates, and the general public. The conferences were broadcasted on the Facebook page of UPC's Accounting and Administration program.

Table 7 presents the list of the conferences offered at the WAW 2021.

Table 7. WAW 2021 – List of Conferences

Date	Topic	Lecturer	Reference	Attendance	Country	Hour	Link
09/06/2021	*Programa Nacional de Auditoría Ambiental en México* [National Environmental Audit Program of Mexico]	Giselle Rodriguez (Research Faculty, Universidad Anáhuac Veracruz)	Performing audits in Mexico in companies that manage corporate sustainability.	57	Mexico	5:30 p.m.	Link
09/07/2021	*Medidas Tributarias otorgadas por el Estado para la Sostenibilidad de las Empresas* [Tax measures granted by the State for business sustainability]	Diana Castillo (Manager Tax Compliance KPMG)	Let's see the tax measures that were and are performed during the COVID-19 pandemic, and some benefits.	162	Peru	5:30 p.m.	Link
09/08/2021	*El Rol del Contador frente a la Crisis, Apoyo a la Sostenibilidad* [The accountant's role during the pandemic to support sustainability]	Efren Ballen (Legal Advisor and Faculty)	Within the COVID-19 pandemic and the context of sustainability, let's have a closer look at the role of accountants in their career and profession.	114	Colombia	5:30 p.m.	Link
09/09/2021	*Relevancia de los Factores ESG en las Organizaciones* [Relevance of ESG factors within organizations]	José Luis Velasquez (Partner at PwC)	Sustainable companies have certain characteristics, let's get to know them and the global trends.	67	Peru	5:30 p.m.	Link

k)   The Accounting and Administration program conducted the 2021 Accounting Friday's program

The "Accounting Fridays" program included several conferences (webinars) focusing on topics related to accounting and business, accounting and tax regulations and best business practices. A total of 433 people attended the venue, including students, graduates, and general public.

The conferences were broadcasted on the Facebook page of UPC's Accounting and Administration program. A list of the conferences is shown in the following table with direct links to the videos.

Table 8. 2021 Accounting Fridays Program – List of Conferences

Date	Topic	Speakers	Reference	Attendance	Country	Hour	Link Video
09/17/2021	*NIIF 15 y Devengo Tributario* [IFRS 15 and Tax Accrual]	Julio Lavado (Senior Tax & Legal Manager)	Let's take a closer look at IFRS 15, and its effects on taxes, differences, and similarities.	62	Peru	5:30 p.m.	Link
09/24/2021	Drawback	Diego Aguilar (Manager at PwC)	Understanding the requirements for companies that wish to export and have tax benefits through drawback.	58	Peru	5:30 p.m.	Link
10/15/2021	*Retenciones, Detracciones y Percepciones de IGV* [VAT withdrawals, subtractions and collections]	Juan Lara (Manager at PwC)	Conference to understand the basics of withdrawals, subtractions and collections.	112	Peru	5:30 p.m.	Link
10/22/2021	*PLE Planillas - PwC* [Electronic Bookkeeping Program - Payroll - PwC]	Nora Paulet (Manager at PwC)	Conference to learn how to manage and structure payroll, for previous use of the monthly payroll (Plame).	93	Peru	5:30 p.m.	Link
10/29/2021	*NIIF 16 - Arrendamientos* [IFRS 16 – Leases]	Rodolfo Paulet (Manager at PwC)	Conference to learn about the implications and main features of IFRS 16.	55	Peru	5:30 p.m.	Link
19/11/2021	*Gestión de Costos de Importación: Errores y Dudas* [Management of import costs: Errors and doubts]	Miguel Pazos (Part-Time Faculty of the Administration and International Business program) Veronica Mendoza (Part-Time Faculty of the Accounting and Administration program)	Conference to learn about different financial, accounting and tax viewpoints with regard to import costs.	53	Peru	5:00 p.m.	Link

l)   Online Interschool MUN Conference - 3rd Edition

From September 10 to 12, 2021, the 3rd UPC MUN Interschool Conference was held, an event inspired by the Model United Nations, which consists of a simulation of a UN General Assembly and other multilateral organizations in which high school students discuss issues of national and international interest.

The students who participated in the event took on the role of ambassadors of UN member countries, which allowed them to learn about, show an interest in, and propose solutions to international issues. Students also developed soft skills, such as public speaking, leadership, and negotiation. This event encouraged young students to conduct research and strengthen their vocation to contribute to initiatives that allow for the development of our country.

Figure 28. UPC MUN 2021 - Conference Flyer

m)   UPC students participated in the 2021 Harvard National Model United Nations Conference

For the ninth consecutive year, the Universidad Peruana de Ciencias Aplicadas (UPC) participated in the Harvard National Model United Nations (HNMUN) – the oldest and most prestigious conference of its kind in the world – with its UPC MUN delegation made up of five students from different programs.

The online conference was held between February 11 and 14 and brought together more than 80 university delegations from prestigious institutions around the world.

During the conference, the students debated topics of great national and international relevance, such as the balance between traditional and modern economy, the future of megacities, rural development, and women's human rights.

Model United Nations (MUN) includes competitions that simulate a session of the UN General Assembly in which each university delegation must represent a country other than its own and faithfully respond to its foreign policy on various topics of debate.

Throughout the conference, students had the opportunity to experience the challenges of negotiation and international diplomacy for four consecutive days in English only. This important international achievement allows UPC to reaffirm and evidence its commitment to provide an education of excellence with a global vision, by training upstanding professionals at national and international level.

Additional information is available at: ([link](#)).

Figure 29. Valeska León Guevara (Law), Diego Portocarrero Riva (Industrial Engineering), Mariana Gálvez Vásquez (Communication and Journalism), students who represented UPC.

Figure 30. Andrea Rivera Gárate (Administration and International Business) and Edson Paredes Ramírez (Information Systems Engineering), students who were part of UPC's MUN delegation.

n) Students of the Administration and International Business program took part in the 2021 International Business Day

Working Adult Undergraduate and Traditional Undergraduate students, as well as faculty members of the Administration and International Business program took part in the 2021 International Business Day, held on April 9, and broadcasted on Facebook LIVE via a webinar.

The "Competitive Management of International Businesses through Online Customs Services" round table included the participation of three experts in international logistics and customs: Andrés Solano, President of the Association of Certified Customs Brokers, Dr. Javier Oyarse, expert in international business, and Master Deckner Campusano, who specializes in customs law.

A total of 657 people attended the event, including internal and external participants.

Additional information is available at: (link).

Figure 31. UPC International Business Day 2021 Conference.

o) The Entrepreneurial Administration and Management program organized the International Congress on Business Innovation "Thinknovation Express"

In September 2021, the Thinknovation Express congress, organized by the Entrepreneurial Administration and Management program, was held for the seventh time.

The central theme revolved around technologies related to public management, as well as digital trends. The presentations were given by local experts, such as Marushka Chocobar, Secretary of Digital Governance of the Presidency of the Council of Ministers of Peru and foreign experts, such as Gabriel Angulo, Deputy Director of Digital Development of the Superintendence of Finance of Colombia, and Marco Martinez O'Daly, Advisor to the Friedrich Naumann Foundation of Mexico.

The event was held 100% online, including one day of conferences held on Thursday, September 23 from 2:30 to 8:30 p.m., which included Q&A rounds. It was broadcasted live on UPC's institutional Facebook page with open access to the entire academic community and other interested parties. A total of 1,859 people attended the venue.

School of Human Sciences

a)   Graduates of the Professional Translation and Interpretation program publish a research paper

Hermēneus is a journal of the School of Translation and Interpretation of Soria (Universidad de Valladolid), of a scientific nature, and aimed at publishing original papers, book reviews and other complementary activities, within the field of translation, interpreting, research, and other areas related to linguistics, documentaries, literature, and human sciences.

On January 10, 2022, Rocio Farias Córdova and Lucía Wiesse Ramos, graduates of the Professional Translation and Interpretation program published a paper titled "*Perdidos en las emociones y la traducción: regulación de emociones en los estudiantes de traducción*" [Lost in Emotions and Translation: Regulation of Emotions in Translation Students] in this prestigious journal.

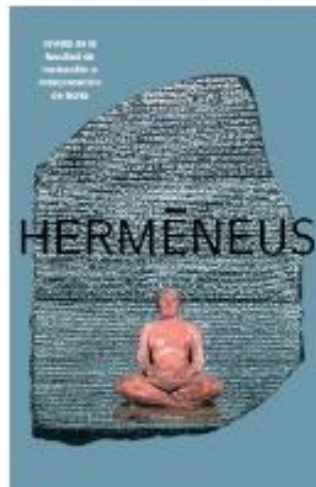Additional information is available at: ([link](#)).

Figure 32. Cover of the Hermēneus journal.

UPC Graduate School - Master's Degree Programs

a) Graduate of the Master's degree program in Administration and Project Management participated as a PMI lecturer in Argentina

The PMI is a non-profit organization and is a world leader that brings together professionals in the field of project management. Its strategy is to establish a global presence through Chapters, in which professional communities are organized per topic; in this case the Entrepreneurship Community (Source: [link](#)).

In May 2021, Anneth Rios Mayer, graduate of the Master's program in Administration and Project Management, participated as a speaker in the webinar on "*Modelo Híbrido de Dirección de Proyectos Biotecnológicos para Startups*" [Hybrid Model of Biotechnology Project Management for Startups], for the PMI Entrepreneurship Community Chapter in Buenos Aires, Argentina (Source: link).

Figure 33. Poster of the webinar on "*Modelo Híbrido de Dirección de Proyectos Biotecnológicos para Startups*" [Hybrid Model of Biotechnology Project Management for Startups].

b) Student of the Online Master's program in Strategic Management of Human Capital published a legal research paper in the *Soluciones Laborales* journal

In June 2021, Carlos Eduardo Saco Chipana, student of the Master's program in Strategic Management of Human Capital, who is also a permanent collaborator of the Soluciones Laborales journal (Gaceta Jurídica S.A.), published a legal research paper titled: "*La viabilidad que, ante el retiro de confianza, el trabajador no pueda ser repuesto si no superó el periodo de prueba en el puesto común*" [The Feasibility that, Upon Loss of Trust, a Worker Cannot Be Replaced if They Did Not Pass the Probationary Period in the Common Position].

This research paper is available at: (link).

School of Health Sciences

a)   Students of the Dentistry program publish papers in various indexed journals

All published papers followed a rigorous methodology for research papers, which prior to publication, are reviewed by an editorial committee of peers who are competent in the field of specialty.

Table 9. Papers published in Indexed Journals by UPC's Dentistry Students (2021)

PUBLISHED PAPERS	AUTHORS	PUBLICATION DATE	AVAILABLE AT
A Novel Polishing Paste (Mollusk Shells) for Poly (Methylmethacrylate)", International Journal of Dentistry, vol. 2021	Nicole Guerra, Evelin Meneses, Stefany Caballero-García, Frank Mayta-Tovalino	July 03, 2021	**Link**
Association between Self-reported Bruxism and Academic Performance in University Students. Journal of Oral Research	Huañec-Paucar, Cynthia; Ayma-León, Valery; Caballero-García, Stefany	August 31, 2021	**Link**
Asociación entre la dieta de la población vegana y la autopercepción del estado periodontal en Lima Metropolitana [Association between the Diet of Vegans and Self-Perceived Periodontal Status in Metropolitan Lima]. Nutricion hospitalaria	Alicia Reyes-Izquierdo, Leonardo Alfredo Flores Gonzales, Carmen Stephany Caballero-García, Ximena Alejandra León-Ríos	November 15, 2021	**Link**
Relevancia de la Apnea Obstructiva del Sueño pediátrica en Odontología. [Relevance of Pediatric Obstructive Sleep Apnea in Dentistry] Revista de Odontopediatría Latinoamericana	Díaz Díaz, M. F., Schlaefli Arrieta, X., & Geller Palti, D	October 22, 2021	**Link**

School of Law

a)   Law students won first place in the 2021 International Arbitration Competition, Moot Madrid

From April 12 to 16, 2021, students of UPC's School of Law participated in the 13th International Arbitration and Commercial Law Competition Moot Madrid in 2021 - Online Edition, winning first place, for the second consecutive year.

The competition, organized by the Universidad Carlos III de Madrid and the United Nations Commission on International Trade Law (UNCITRAL/UNCITRAL), was attended by 31 teams from 12 different countries: Argentina, Bolivia, Brazil, Chile, Colombia, France, Guatemala, Honduras, Mexico, Peru, Spain, and the United States.

At the end of the competition, UPC's team faced the team of the Universidad Nacional Mayor de San Marcos. UPC's team was led by faculty members Elvira Martínez Coco, Ricardo Ampuero Llerena, Mitzy Longa and Oscar Ponce de León Martínez and students Lucía Córdova Heredia and Hernán Castro Tovar, as well as the research group formed by Evelyn Silva, Thalía Jiménez, Ángelo Vásquez and Edgard Huamán.

It is worth noting that this was the fifth time that the students won first place in international arbitration competitions, demonstrating that UPC, in addition to providing its students with a solid legal training, fosters a global vision of business and economics, preparing them for the needs of international markets.

Figure 34. Students and faculty members who participated in the event.

b) Law students won second place and the prize for Best Brief in the Moot Court, Manfred Lachs Space Law competition

Since its inception by the International Institute of Space Law (IISL) in 1992, the Manfred Lachs Space Law Moot Court Competition has grown to cover five world regions: North America, Latin America, Europe, Asia Pacific, and Africa. More than 60 teams participate yearly in this competition. Registered teams get exclusive on-line access to papers of the IISL's Colloquium Proceedings from 2005.

UPC's Law School successfully co-organized the Latin American regional rounds of the Manfred Lachs Space Law Moot Court. This global competition is held in English and is organized annually by the International Institute of Space Law (IISL), with the objective of choosing, through regional rounds (Latin America, North America, Europe, Asia-Pacific, and Africa), the best teams who will be presented before a Tribunal made up of judges or former judges of the UN International Court of Justice.

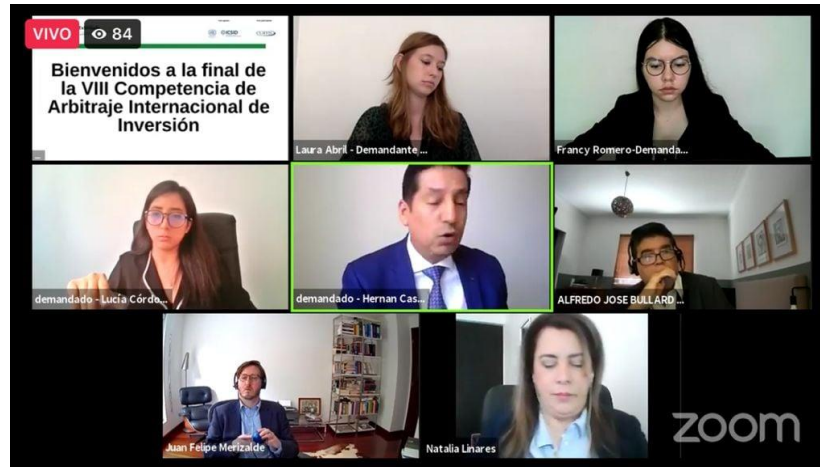Additional information is available at: (link).

c) Second place at the 8th International Investment Arbitration Competition

The purpose of the International Investment Arbitration Competition is to study the resolution of investment disputes through international arbitration by simulating an arbitration process based on a hypothetical case.

In March 2021, UPC's School of Law presented a team of students and graduates who participated in the 8th International Investment Arbitration Competition.

The team was led by faculty member Elvira Martínez Coco, accompanied by faculty member Ricardo Ampuero Llerena, graduates Mitzy Longa and Oscar Ponce de León Martínez, and students Lucía Córdova Heredia and Hernán Castro Tovar, as well as the research group formed by Evelyn Silva, Thalía Jiménez, Ángelo Vásquez and Edgard Huamán.

Additional information is available at: ([link]).

Figure 35. 8th International Investment Arbitration Competition (2021).

d) Graduate Paulo Castañeda was recognized as the Best Speaker at the 14th International Arbitration Competition

The International Arbitration Competition aims to study international commercial law and arbitration as a means to solve disputes. From September 30 to October 4, 2021, the 14th International Arbitration Competition was organized by the School of Law of the Universidad de Buenos Aires and the School of Jurisprudence of the Universidad de Rosario, Colombia.

UPC's School of Law was among the top 4, obtaining the best score in the general rounds. Graduate Paulo Castañeda, of UPC's team, was recognized as the Best Speaker of the competition.

The team was led by faculty member Elvira Martínez Coco, accompanied by the research students Thalía Jimenez, Victoria Acosta, Evelyn Silva, Dario Orihuela, Angelo Franco, Pamela Venegas, and Jimena Crespo, led by Lorena Gamarra, who did an excellent job.

School of Design

a) Graduate of the Professional Graphic Design program was granted an Honors Degree for outstanding project

Stephanie Monzón Llave, graduate of UPC's Professional Graphic Design program, and student of the Master's Degree in Design and Graphic Communication at Universidad CEU Cardenal Herrera, in Spain, was awarded an honors degree for her outstanding project. She, along with her partner, Laura Gonzales Gómez, created a special edition of the renowned coffee brand, Lavazza.

Despite the global pandemic, during her year in Spain, Stephanie learned from the best Spanish designers, who taught her to "train her eyes to see a world of images". She quickly realized that graphic designers must be driven by a strong image culture. Her winning project is a vindication of the women of Ethiopia. This way, she raises awareness about fundamental rights and how they are currently affected. "Through the use of colors and symbols, we wanted to share a message of positivism, showing Ethiopian women united and looking towards the future," in the words of Stephanie Monzón Llave.

Additional information is available at: (link).

Figure 36. Design of the Lavazza brand.

School of Education:

a) Graduates and faculty members of the Educational and Pedagogical Management program published joint papers

In August 2021, graduates and faculty members of the Educational and Pedagogical Management program published joint papers. Table 10 show the list of the papers published.

Table 10. List of published papers in 2021

PUBLISHED PAPERS	AUTHORS	PUBLICATION DATE	AVAILABLE AT
Publication of the paper (Revista Electrónic@ Educare, Universidad de Costa Rica, indexed in Scopus Q3)	Cruz, A., Hugo, A. & Ruiz-Ruiz, M.F.	August 24, 2021	Link

PUBLISHED PAPERS	AUTHORS	PUBLICATION DATE	AVAILABLE AT
Percepciones de papá y mamá sobre maestros varones en la educación inicial peruana [Parents' Perceptions of Male Teachers in Peruvian Early Childhood Education]			
Publication of the paper (Revista Conrado, Universidad de Cienfuegos de Cuba, indexada Web of Science) *Actitudes de estudiantes de escuelas religiosas limeñas respecto a la igualdad de género* [Attitudes of Students in Religious Schools in Lima Towards Gender Equality]	Abregú-Sáenz, A.L., Mejia-Alvarez, F.Z. & Ruiz-Ruiz, M.F.).	November 16, 2021	Link

School of Contemporary Arts

a) **The album "*Perú, un sonido*" [Peru, One Sound] received the "*Bicentenario Perú 2021*" [Peru 2021 Bicentennial] seal**

The album "*Perú, un sonido*" [Peru, One Sound], produced by UPC's Peruvian Music Troupe, was awarded the "*Bicentenario Perú 2021*" [Peru 2021 Bicentennial] seal, granted by the Ministry of Culture. The record, which includes nine musical themes, is a tribute to the Peruvian people and a celebration of the country's 200th anniversary of Independence.

The Ministry of Culture grants this recognition to initiatives that contribute to promoting and positioning Peru's Bicentennial. It also highlights all works in celebrate Peru's identities, millenary cultural, and cultural diversity as a source of creativity.

Of the songs that are part of "*Perú, un sonido*" [Peru, One Sound], seven are original songs written by the members of the troupe (both students and graduates), in which the melodies and lyrics represent different manifestations of Peru's national folklore. UPC Cultural organized the exhibition "*Perú, un sonido*" [Peru, One Sound], for people to enjoy the album and the artistic creation process.

Figure 37. UPC's Peruvian Music Troupe.

b) A musical group made up of students of the School of Music have been selected by the Recording Academy Grammy Awards to be part of its virtual platform

The Recording Academy has revealed the nominations for all 86 categories for the 2021 GRAMMYs Awards show.

In August 2021, graduates of the Music program, who have formed the band TWICE, which has 170,000 followers on Facebook and 623,000 followers on You Tube, were selected by the Recording Academy Grammy Awards to be part of the cast of outstanding artists that are included in the Academy's virtual platform by presenting an acoustic version of the song "*Que no se apague tu Luz*" [Don't Let the Lights Go Out], which is a clear recognition of their wonderful work and the impact that their music has on people and the Latin American music industry.

Additional information is available at: ([link](#)).

Figure 38. Israel Risco, Alexandra Berrios, Daniel Chumbe and Pablo Velasquez.

c) Students of the School of Music won Best Original Song and Best Lyrics at the Parai Musical International Awards in India

The Parai Musical International Film (PMIA) is all about screening the best documentaries and fiction films on music. Pop/rock music, classical music, jazz, rap, soul, dance, Movie Background Score (Any length), Movie Song / Album, VFX (Any length), Indian movie song / Album, urban, any Music.

Biographies, concert registrations, music videos, music biopics. This festival is aimed at a wide audience; music and film lovers from all over the world. In addition, some screenings, such as premieres, can be made extra attractive by a live performance by the artist in question. This way, the liveliness of the festival in the city can be underlined.

Anthony Rumiche Yactayo, a student majoring in composition, wrote the music of the short film "*¿Quién se ha robado mi corazón?*" [Who has Stolen my Heart?], which was screened during the Parai Musical International Awards Festival in India, winning in the categories of Best Original Song and Best Lyrics.

This event was held on October 10, 2021, and, as performing musicians in the short film, the students of the Music program – Nicole Ramirez on percussion and Cesar Ortiz on acoustic guitar – also participated in the festival.

Additional information is available at: ([link](#)).

Figure 39. Nicole Ramírez (percussion), Anthony Rumiche Yactayo (composer and co-author), and César Ortiz (acoustic guitar), students of the UPC's School of Music.

d)   Students of the School of Music were selected to create the 2021 Telethon anthem

In October 2021, graduate Paulo Morales was selected to produce the 2021 Telethon anthem (Source: [link](#)). The Telethon is a televised charity event, which includes artistic and entertainment presentations from different countries in order to raise funds for various social causes.

The selection of Paulo was of great significance as it positions him among the best local producers. In addition, Diego Rodriguez (drums and percussion) and Marco Ríos (vocal recording and vocal editing) also participated in the recording and production process of the hymn.

Figure 40. Marco Ríos (vocal recording and editing), Diego Rodriguez (drums and percussion) and Paulo Morales (music producer).

School of Engineering

Students of the Industrial Engineering program published research papers in different international conferences

Students of the Industrial Engineering program published their research papers in different international conferences.

Table 11. Published Research Papers presented at International Conferences (2021)

PUBLISHED PAPERS	INTERNATIONAL CONFERENCE	PUBLICATION DATE	AUTHORS	AVAILABLE AT
"Agile Logistics Management Model to Reduce Service Times and Improve Processes Using Lean Service Methodology in Companies in the Electrical Sector"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/01/2021	Viviana Fátima Barriga Palomino	Link
"Cold Supply Chain Logistics Model Applied in Raspberry: An Investigation in Perú"	Springer Publishing House - Advances in Intelligent Systems and Computing	01/01/2021	Graduates Mijail Luis Tardillo Mejia and Jorge Torres de la Cruz	Link
"Combined Method Redesign for the Packing Area in a Peruvian Bakery SME Provider of National Food Programs"	Springer Publishing House - Advances in Intelligent Systems and Computing	01/01/2021	Graduates Mario Joseph Quintanilla Anicama and Johana Cheyenne Congona García	Link
"Implementation of Lean and Logistics Principles to Reduce Non-conformities of a Warehouse in the Metalworking Industry"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/26/2021	Graduate Nicole Yarixa Espinoza Sanchez	Link
"Integrated Model of Maintenance Management and Inventory System in a Fleet of Trucks"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/28/2021	Graduates Magda Janett Portal Garcia and Rosa Marcela Raquel Vera Cabello	Link
"Inventory Management Model in the Commercial Sector to Reduce Inventory Levels through the Use of Demand Forecasts and Economic Order Quantity"	ACM International Conference Proceeding Series	01/08/2021	Graduates Paolo Franchesco Cornejo Ramos and Walter Josué Moreno Cervantes	Link
"Lean Inventory Management Model to Reduce Defective Products in Peruvian Baking SMEs"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/28/2021	Graduates Ismael Ángel Fernández Paredes and Nadia Cecilia Jurado Muñoz	Link
"Lean Service Model for Maintenance Management Using a Linear Programing Approach"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/28/2021	Graduates Maria Trinidad Damian Zuasnabar and Maribel Chambilla Vega	Link

PUBLISHED PAPERS	INTERNATIONAL CONFERENCE	PUBLICATION DATE	AUTHORS	AVAILABLE AT
"Logistics Management Model to Increase the Level of Service in a SME Footwear Marketer"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/28/2021	Graduates Edward Hermenegildo Lavado Padilla and Milagros Rocio Pariona Hizo	Link
"Management Model for Improving the Quality of Glazing by Applying Lean Manufacturing Tools in a Ceramics Plant"	ACM International Conference Proceeding Series	01/08/2021	Graduates Almendra Araceli Telles Rodríguez and Clara Lorena Vásquez Calampa	Link
"Model for the Optimization of the Supply Process in a SME Associated with the Consortium of the Metalworking Sector"	10th International Conference on Industrial Technology and Management (ICITM 2020)	03/28/2021	Graduates Paola Alejandra León Andia and Lilian Paola Gonzales Camarena	Link
"Process approach and SCOR model to reduce delivery delays for a maintenance equipment supplier for mineral transportation	19th LACCEI International Multi-Conference, 2021	07/23/2021	Graduates Fernando Salas Loayza and Ricardo Jose Barboza Miyoshi	Link
"Combined Method Redesign for the Packing Area in a Peruvian Bakery SME Provider of National Food Programs"	AHFE 2021 International Conference	07/04/2021	Graduates Brian Walter Tarazona López and Jose Alberto Castillo Castañeda	Link
"Proposal to Improve the Inventory Management Model in a Textile SME based on the Plan for Every Part"	19th LACCEI International Multi-Conference, 2021	07/23/2021	Graduates Kusy Nataly Argumedo Gonzales and Daniel Angel Pumahuare Ayala	Link
"*Rediseño ergonómico para disminuir los TME en procesos manuales de una planta del sector de GLP para incrementar la eficiencia*" [Ergonomic Redesign to Reduce MSDs in Manual Processes of a Factory in the LPG Sector to Increase Efficiency.]	19th LACCEI International Multi-Conference, 2021	07/23/2021	Graduates Jorge Augusto ProFeijoo and Yakeline Rosario Loa Puris	Link
"Supply Chain Management Based on House of Risk: A Case Study in a Peruvian Banana Company"	Springer Publishing House - Advances in Intelligent Systems and Computing	01/01/2021	Graduates Carla Gabriela Avila Arteaga and Gianfranco Miguel Arauco Galarza	Link

Students of the Electronic Engineering program published a scientific paper in a peer-reviewed journal

On February 25, 2021, students Bryan Huaytalla and Diego Humari, in collaboration with faculty member Guillermo Kemper, of the Electronic Engineering program, published a scientific paper in a peer-reviewed journal: An algorithm for Peruvian counterfeit Banknote Detection based on Digital Image Processing and SVM.

The article contains a research work on the detection of counterfeit banknotes using digital image processing.

Additional information is available at: (link).

Students of the Mechatronics Engineering program published papers in indexed conferences

In 2021, students of the Mechatronics Engineering program published papers in different indexed conferences.

Table 12. List of published papers in indexed conferences

SCIENTIFIC PAPER	AUTHORS	PUBLICATION DATE	AVAILABLE AT
"Development of An Online PTT Voice Transmission System Between Cell Phones, Computers and Embedded Systems Over the Internet," 2021, 3rd East Indonesia Conference on Computer and Information Technology (EIConCIT), 2021, pp. 95-98	Alexander Díaz	04/11/2021	Link
"Data Mining Application for the Collection of Scheduled Power Outages Made by Electricity Distributors in Peru," 2021 International Conference on Applied Artificial Intelligence (ICAPAI), 2021, pp. 1-6	Alexander Díaz	05/21/2021	Link
"Development of a Heart Wave Transmitter between Android Devices Using iLBC Coding over the Internet," 2021 IEEE International Conference on Health, Instrumentation & Measurement, and Natural Sciences (InHeNce),2021,pp.1-4	Alexander Díaz and Juan Alfaro	07/16/2021	Link

The papers of students of UPC's Computer Science program were accepted at the IEA/AIE 2021 and FRUCT 28 congress

The IEA/AIE 2021 puts emphasis on the applications of applied intelligent systems to solve real-life problems in all areas, including engineering, science, industry, automation and robotics, business and finance, medicine and biomedicine, bioinformatics, and cyberspace. FRUCT is a large pan-European cooperation framework that promotes open innovations from academia and industry. This high-quality scientific event gathers scholars and entrepreneurs to develop projects.

Table 13. List of published papers at the IEA/AIE 2021 and FRUCT 28 congress

PAPER	CONGRESS	AUTHORS
Query by Humming for song Identification using voice isolation	IEA/AIE 2021	Edwin Luis Alfaro Paredes Leonardo Daniel Alfaro Carrasco
Story Creation algorithm using Q-Learning in a 2D Action RPG video game	FRUCT 28	Diego Fernandez Carlos Guizado Diaz
Classification of fruit ripeness grades using A Convolutional Neural Network and Data Augmentation	FRUCT 28	Franco Pastor Mauricio Rodriguez Ochoa

The papers of students of UPC's Computer Science program were accepted at the ICTAI 2021 and IC3K 2021 congresses

ICTAI 2021 is a leading annual IEEE-CS scientific conference that ran from August to December 2021 and provided an important international forum for the creation and exchange of ideas related to artificial intelligence between academia, industry, and government agencies.

The conference fostered the exchange of ideas and their transfer to practical tools for developing intelligent systems and pursuing artificial intelligence applications.

The purpose of IC3K 2021 was to bring together researchers, engineers, and practitioners in areas of knowledge discovery, knowledge engineering and knowledge management. (Source: link).
The following students took part in the event:

- Diego Alonso Johnson Yañez
- Oscar Enrique Fernandez Ramos
- Mariano de Rivero Burbank
- Cristhiam Segundo Tirado Alfaro

Additional information is available at: (link).

The Software Engineering program submitted research papers

During the second term of 2021, the students of the program submitted twelve research papers in prestigious conferences, such as SHIRCON 2021, EIRCON 2021, FRUCT30, CISETC, CICIC, thus achieving the highest number of papers submitted by the program thus far. (Source: link).

Table 14. List of published papers in different conferences

PAPERS	AUTHORS	AUTHORS	CONGRESS
Proxemics toolkit for F-formation patterns detection	Alvarez Masgo, Paul Javier	Rivas Arroyo, Mauricio Jesus	FRUCT 30
Implementación de un sistema remoto para la supervisión de exámenes online mediante el uso de cámaras con inteligencia artificial [Implementation of a Remote System for the Supervision of Online Exams Using Cameras with Artificial Intelligence.]	Santa Cruz Miñano, Angel	Alba, Jean Pierre	EIRCON 2021 - ENGINEERING INTERNATIONAL RESEARCH CONFERENCE
ARSOCCER: *Desarrollo de un Videojuego en Tiempo Real con Realidad Aumentada y Agentes de Conocimiento* [Development of a Real Time Videogame with Augmented Reality and Knowledge Agents]	Marquez Paico, Francis	Jara Palomino, Diego Alfredo	EIRCON 2021 - ENGINEERING INTERNATIONAL RESEARCH CONFERENCE
Beat Time: *Videojuego de Baile con Detección de Movimiento y Reconocimiento de Rostro* [Dance Video Game with Motion Detection and Face Recognition]	Valentin Leandro, Jerber Guillermo	Anca De La Cruz, Joseph Anthony	EIRCON 2021 - ENGINEERING INTERNATIONAL RESEARCH CONFERENCE
Implementation of a Solution for the Remote Management of Speech Therapy in Post-Op Cleft Lip Patients Using Speech Recognition and Gamification	Aranda Garay, Angel Piero	Vargas Benites, Víctore Sahel	EIRCON 2021 - ENGINEERING INTERNATIONAL RESEARCH CONFERENCE
Dice Combat: Development of a Dice Combat Video Game for Mobile Devices Using Ensemble Interactions Patterns	Jordi Brandon Collao Silva	Eielson Johnne Ramos Cuadros	IEEE Science and Humanities International Research Conference – 2021 SHIRCON
Implementation of a Customized Content Management System for Digital Marketing Based on LG webOS Signage and Beacons Usage	Arturo Andrade	Hugo Bullon	IEEE Science and Humanities International Research Conference – 2021 SHIRCON
Leaper: Video Game Development on Android Devices with Cross-Device Interaction	Gonzalo León Suárez	Kevin Tito Choquevilca	IEEE Science and Humanities International Research Conference – 2021 SHIRCON
Aplicación Móvil para Predecir la Probabilidad de Pertenecer al Grupo de Riesgo Cardiovascular Utilizando Machine Learning [Mobile App to Predict the Probability of Belonging to a Cardiovascular Risk Group Using Machine Learning]	Galindo Honores, Luis Alejandro	Chávez Olivera, Omar Alex	CICIC 2021
Aplicación Cloud para la generación de sitios web estáticos mediante el reconocimiento de Wireframes usando Inteligencia Artificial [Cloud App for	César Augusto Gutierrez Velasquez	Rodrigo Max Lara Camarena	CISETC 2021

PAPERS	AUTHORS	AUTHORS	CONGRESS
Static Website Generation through Wireframe Recognition Using Artificial Intelligence]			
Optimization and Improvement of Bidirectional Connections with Web Socket on Synapse Framework Using Web Workers Technology	Arias Cespedes, Eduardo Alexis	Arellano Soto, Michael Alonso	IEEE Science and Humanities International Research Conference – 2021 SHIRCON
Design and Development of an Augmented Reality Application for Art Galleries and Museums in Peru	Linares Correa, Diego Daniel Van Waerebeek Alfaro, Kenzo Ettore	Daniel Alejandro Subauste Oliden	19th LACCEI International Multi-Conference for Engineering, Education, and Technology

Student of the Environmental Engineering program participated in an international Citizen Science project organized by CEDAR

The Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) Program, funded by the National Science Foundation's Atmospheric and Geospace Sciences Division, studies the interaction region of the Earth's tenuous upper atmosphere.

The CEDAR mission is to understand the fundamental properties of the space-atmosphere interaction region; identify the interconnected processes that define the global behavior of the ionosphere-thermosphere region, evolution, and influence on the Sun-Earth system; and to explore the ionosphere-thermosphere predictability.

Stephany Ccanto, a sophomore student of the Environmental Engineering program, made a presentation on the Citizen Science project applied to the scaling of ionograms at the Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) 2021 Workshop. Citizen Science is a form of collaborative research or data collection by non-experts. Projects in this category benefit scientists by providing resources for data processing, collection, pattern recognition, etc. For volunteers, this represents the democratization of science and the opportunity to get involved in local issues, as well as providing a strong public education aspect.

The Citizen Science project applied to ionogram scaling will be implemented through the zooniverse.org platform, using data from the Jicamarca Radio Observatory ionosonde. Participants use a built-in drawing tool to identify the ordinary and extraordinary lines of an ionogram power image, which can then be used for parameter estimation.

Additional information is available at: ([link](#)).

Figure 41. Student of the Environmental Engineering program, who participated in an international Citizen Science project organized by CEDAR.

Students of the Environmental Engineering program participated in the 3rd Symposium on Science for Sustainable Development

The Symposium on Science for Sustainable Development is an international, inter-university and multidisciplinary academic event, organized by a group of universities with extensive experience in Latin America, which aims to give continuity and disseminate student projects in the field of sustainable development from a scientific and social perspective in various disciplines with a global vision.

In its third edition, the event was held online and became an open platform that promotes the exercise of scientific research as a tool for the achievement of the SDGs in universities. Moreover, it provides a space to form regional partnerships for sustainability.

In this opportunity, the Symposium was organized by the Universidad Latina de Costa Rica, from October 19 to 21, 2021. A total of 52 students from the Environmental Engineering program took part in the event and presented 14 UPC projects. In addition, Professor Yoisdel Castillo participated with a keynote lecture on "*Evaluación de Sostenibilidad mediante el análisis energético de la combustión de biomasas*" [Sustainability Assessment through Energy Analysis of Biomass Combustion].

Additional information is available at: ([link](#)).

Figure 42. Poster of the 3rd Symposium on Science for Sustainable Development

Graduate of the Civil Engineering program was admitted to the University of Illinois Urbana-Champaign to study a Master's degree in Structural Engineering.

In March 2021, Kurt Soncco, graduate of UPC's Civil Engineering program, was admitted to the University of Illinois Urbana-Champaign to study a Master's degree in Structural Engineering in the Department of Civil and Environmental Engineering.

Students of the Civil Engineering program participated in the 2021 International Summer School

The Summer School course: Real Estate Project Management was held from March 1 to 12, 2021 and was developed by four faculty members of the Universidad Viña del Mar of Chile: Dr. Miguel Vera Sánchez, Eng. Juan Carlos Paez, Eng. Manuel Muñoz, and Eng. Victor Inostroza Bilbaocon, with the participation of 35 students.

Graduate of the Civil Engineering program presented a paper at the 6th International Conference on Building Materials and Construction - ICBMC 2021 in Singapore

The 6th International Conference on Building Materials and Construction (ICBMC 2021) was successfully held online on March 11-14, 2021. The conference consisted of 3 keynote lectures, 1 guest lecture and 12 discussion panels. Speakers from 30 countries and various disciplines gathered online and made excellent presentations. With everyone's support, the four-day conference was successfully hosted online.

Bruno Alva Coz, graduate of the Civil Engineering program, presented a paper on "Process for Optimization of the Selection of Construction Subcontractors Using the AHP Technique". The academic

paper was prepared by graduate Bruno Alva Coz in collaboration with his advisor, Professor Sandra Rodriguez, based on his thesis work.

Additional information is available at: ([link](#)).

Figure 43. Certificate of participation of Bruno Alva.

Student of the Civil Engineering program presented a paper to the 4th International Conference on Civil Engineering and Architecture (ICCEA 2021) in South Korea
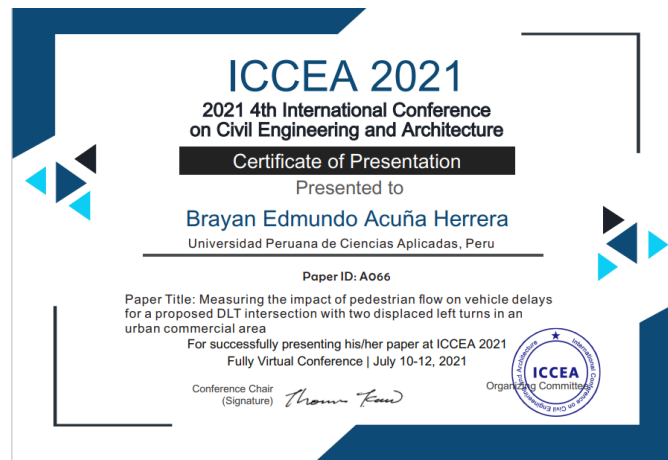
The 4th International Conference on Civil Engineering and Architecture (ICCEA 2021), held on July 10-12, 2021, was technically sponsored by the Innovation Center for Engineering Education at Seoul National University, and was successfully held online.

The ICCEA 2021 conference program spans over 6 created themes, including Road Design and Geological Engineering, Road Design and Geological Engineering, Education and Knowledge Engineering, Concrete Structures Design and Performance Analysis, Construction Materials and Structural Engineering, Urban Planning and Development, which are well balanced in content, manageable in terms of many contributions, and create a discussion space for trending topics.

Brayan Edmundo Acuña, student of the Civil Engineering program, presented a paper on "Measuring the Impact of Pedestrian Flow on Vehicle Delays for a Proposed DLT Intersection with two Displaced Left Turns in an Urban Commercial Area".

The academic paper was prepared by UPC's graduate under the guidance of faculty member Alex Sanchez based on his thesis work.

Additional information is available at: ([link](#)).

Figure 44. Certificate of participation of student Brayan Edmundo Acuña.

Student of the Civil Engineering program presented a paper at the LACCEI International Multi-Conference of Engineering, Education and Technology

LACCEI is a non-profit organization of Latin American and Caribbean (LAC) institutions that offer academic programs in Engineering and Technology as well as institutions (i.e. universities, colleges, schools and businesses) from other parts of the world that have demonstrated interest and activities with LAC institutions.

The LACCEI conference accepts papers written in English, Spanish, Portuguese, and French. All accepted and presented papers are published in the proceedings with ISSN, ISBN. Full papers undergo double-blind review, and if accepted and presented, are published with DOI, and processed for evaluation by Scopus and other indexes. While Work in Progress submissions undergo single-blind review, are presented as posters and published in the conference proceedings. Submissions to the student paper competition undergo single-blind review. The top 10 finalists compete in a technical presentation and are published with DOI and submitted for indexation.

Cristian Carrasco, student of the Civil Engineering program, presented online a paper on "Retrofit of Old Public Schools using Conservative and Innovative Procedures" at the 2021 LACCEI International Multi-Conference of Engineering, Education and Technology that took place from July 19 to 23.

The academic paper was prepared by the graduate with the guidance of faculty member Guillermo Huaco based on his thesis work. Faculty member Guillermo Huaco also presented a paper in collaboration with other specialists on "*Rápido Reforzamiento de Infraestructura Minera Stacker de mas de 30 Años de Uso Debido Amplificacion de Carga*" [Rapid Reinforcement of Mining Stacker Infrastructure of more than 30 Years of Use Due to Load Amplification].

Additional information is available at: (link).

The 5th Meeting of Civil Engineering Chapters - UPC took place in July 2021

For the fifth consecutive year UPC's Student Chapters organized their annual conferences bringing together renowned speakers from different disciplines of Civil Engineering.

The 5th Meeting of Civil Engineering Students focused on: the evolution of technology in the construction industry in Peru's bicentennial and was organized by the student chapters of UPC's Civil Engineering program, with the participation of ACI UPC (American Concrete Institute), ICM (Integral Construction Management), Vias UPC, CEIE UPC, CEMA PERU UPC, IAHR UPC, from July 18 to 26, 2021.

Approximately 300 students participated in the event.

Additional information is available at: ([link](#)).

Students of the Civil Engineering program participated in the 2021 International Winter School

The Winter School course on Road Management was held from August 2 to 13, 2021 and was developed by faculty members from the Universidad Viña del Mar in Chile: Miguel Vera, Manuel Muñoz, Erick Reiser, Marcelo Meneses, Claudio Breschi, Edison Paz, Gerardo Soto. A total of 35 students participated in the course.

Students of the Civil Engineering program participated in international conferences

In 2021, at least 2,000 students participated in the following international conferences:

- *Relación entre el modelo geométrico y el modelo analítico en el BIM ESTRUCTURAL* [Relationship between Geometric Model and Analytical Model in STRUCTURAL BIM] (Universidad Europea de Madrid, Spain) held on April 16, 2021 (Source: [link](#)).

- *Implementación de Last Planner en Latinoamérica* [Implementation of Last Planner in Latin America] (Universidad Andrés Bello, Chile) held on March 23, 2021 (Source: [link](#)).

- *Planeación, estudios y diseño de sistemas metro con énfasis en el Metro de Monterrey* [Planning, Studies and Design of Metro Systems with emphasis on the Monterrey Metro] (Universidad de Monterrey. Mexico) held on May 28, 2021 (Source: [link](#)).

- *Monitoreo remoto de taludes* [Remote Slope Monitoring] (University of Alberta, Edmonton, Canada) held on August 25, 2021 (Source: [link](#)).

- *Inspección técnica de obras de hormigón - Un aporte a la calidad* [Technical Inspection of Concrete Works - A Contribution to Quality] (Universidad Andres Bello, Chile) held on October 22, 2021 (Source: [link](#)).

- *Potencial Sísmico en Costa Rica* [Seismic Potential in Costa Rica] (Universidad Latina de Costa Rica) held on October 15, 2021 (Source: [link](#)).

- *Proyectos de Restauración* [Restoration Projects] (Universidad de Viña del Mar - Chile) held on September 24, 2021. (Source: link).

First International Congress on Lean Construction LATAM 2021 organized by UPC's Student Chapter on Lean Construction

UPC's Student Chapter on Lean Construction organized the First International Congress on Lean Construction LATAM 2021. Speakers from Peru, Mexico, Colombia, Panama, Costa Rica, Bolivia, Spain, and the United Kingdom addressed current issues related to construction. The event was held from October 11 to 16, 2021. Approximately 150 students participated in the event.

Additional information is available at: (link).

Figure 45. First International Congress on Lean Construction LATAM 2021.

Graduate of the Business Management Engineering program enters the Chilean market with "Nutrishake Andino"

Carlos Noceda, graduate of the Business Management Engineering program, has been in the business of healthy products for more than five years. In 2015, he founded Nutrishake Andino with the sale of healthy smoothies with Andean cereals such as quinoa, kiwicha, tarwi and cañihua. Later, they expanded their product portfolio and offer now quinoa and kiwicha cookies, with ingredients such as cocoa, apple, blueberries, strawberry, and cinnamon, which are their most sought-after products.

As a result of deals with Cencosud, Oxxo and Tambo, their products can be purchased on a larger scale. Due to the success of their products in the Peruvian market, they decided to take it to the next level and establish their operations across Latin America and enter the Chilean market.

Additional information is available at: (link).

Figure 46. Carlos Noceda, graduate of the Business Management Engineering program.

Students of the Business Management Engineering program published their research papers in various international conferences in 2021

In 2021, students of the Business Management Engineering program published 22 conference papers in different international conferences. The following table provides a list of the papers, authors, and conferences.

Table 15. Business Management Engineering Research Papers presented at International Conferences (2021)

Title	Authors	Journal / Event
A Strategic Lean Procurement Model Based on Supplier Approval to Reduce Unplanned Downtime in a Textile Small and Medium-Sized Enterprises	Ramirez-Mitma M., Rojas-Garcia J., Torres-Sifuentes C., Raymundo C.	Smart Innovation, Systems and Technologies
BPM model of design management under a Design Thinking approach to implement new products in textile SMEs	Diaz Cavero, Sebastian Alejandro; Cano Salazar, Jean Carlos,Raymundo Ibáñez, Carlos Arturo	IHSED 2021
Business model focused on healthy food sales companies with the primary use of organic supplies	Mariño Guia, Ghina Rossmery; Prado Ventocilla, Mariano Junior; Carlos Cespedes; Carlos Raymundo	Eircon 2021
Design of digital transformation model for games and entertainment companies.	Luis Cardenas, Gianpierre Zapata y Diego Zavala,	IHSED2021
Design of the Digital Experience of the clothing retail companies in Peru	Luis Cardenas, Gianpierre Zapata y Diego Zavala	IHIET-2021

Title	Authors	Journal / Event
Desing of an exoesqueleto to prevent and to take care of the spinal column of causing injuries of lumbalgia	Jean Jairo Luna Ramirez, Guersom Carlos Quispealaya Lazo , Madai Keila Taype Mateo, Grimaldo Quispe Luis Rivera and Francisco Dominguez ,Rivera Cumbicus, Luis Miguel	IHSED2021
Diseño de un modelo para el control de proveedores dentro de la cadena de suministros de una microempresa del sector textil utilizando supply chain operations reference [Design of a model for the control of suppliers within the supply chain of a micro-enterprise in the textile sector using supply chain operations reference]	Cornejo Cabanillas, Katya Milagros; Muñoz Corales, Ninuzka Alondra; Cynthia Elias; Carlos Raymundo	AIC-2021
Knowledge management model under the risk and project management approach to reduce time and costs in Peruvian construction SMEs	Flores Villa, Linda; Meza López, Alexandra Jimena; Carlos Cespedes; Carlos Raymundo	Eircon 2021
Maintenance management through Six Sigma for the optimization of the productivity of a metalworking SME	Gianpierre Zapata; Carlos Raymundo; Francisco Dominguez	IHIET-FS
Management Model for increasing sales using Theory of Restrictions in furniture SMEs	Rodriguez Gave, Yoselin Karen; Jose Roja; Carlos Raymundo	Eircon 2021
Modelo de negocio bajo el enfoque del Design Thinking y La Casa de la Calidad para disminuir la incertidumbre de aceptación de un producto nutricional para la anemia en niños [Business model under the Design Thinking approach and The House of Quality to reduce the uncertainty of acceptance of a nutritional product for anemia in children]	Carlos Raymundo; Saby Pastro-Paredes; Edu Guerrero-Aguilar Cinthia Elias-Giordano	LACCEI 2021
Modelo integral para el proceso de abastecimiento utilizando Lean SixSigma para Minimarkets en Lima [Integral model for the supply process using Lean SixSigma for Minimarkets in Lima]	Chipana Obregon, Elena Isabel; Yaipén Torres, Salvattore Eugenio; Maribel Perez, Carlos Raymundo	AIC-2021
Modelo lean green de gestión de la producción bajo un enfoque de economía circular para reducir los costos variables en una PYME del sector plástico [Lean green production management model under a circular economy approach to reduce variable costs in an SME in the plastics sector]	Gambetta Carpio, Marcelo; Diaz Salazar, Roberth; Jose Rojas	IHSED2021
Performance evaluation design to increase efficiency in a piecework production process in a fishing company, through RFID technology and 360 ° Feedback	Solimano Carrillo, Andrea; Real Dominguez, Valeria Cristina; Cesar Ramirez; Carlos Raymundo	Eircon 2021
Plan de negocio para la elaboración de un dulce con alto valor nutricional y que ayude a combatir la anemia en niños de Lima Metropolitana a través de las tecnicas del Design Thinking y La Casa de la Calidad [Business plan for the development of a candy with high nutritional value and that helps to combat anemia in children in Metropolitan Lima through the techniques of Design Thinking and The House of Quality.]	Guerrero Aguilar, Edu Alberto; Pastor Paredes, Saby Sthefany; Raymundo Ibáñez, Carlos Arturo	ICITM2021

Title	Authors	Journal / Event
Process Management Model that allows increasing the levels of labor productivity of employees in mypes of the beauty and aesthetic sector in Lima-Peru	Espinoza Callan, Sheyla Milagros; Florián Yorgest, María Guadalupe; Cynthia Elias; Carlos Raymundo	Eircon 2021
Productivity Improvement Model Using the Business Transformation Approach in Poultry Processing Plants	Real-Dominguez D., Villanueva-Pariona G., Ramirez-Valdivia C., Raymundo C.	Proceedings - 2021 10th International Conference on Industrial Technology and Management, ICITM 2021
Proposal for a system of human management processes to improve the predictors of staff turnover in smes dedicated to the service sector	Fernando Sotelo; Grecia Morales; Kaduo Uchida; José Rojas	IHIET-FS
Propuesta de mejora de gestión de producción esbelta mediante el uso de Metodologías Ágiles y Lean Manufacturing en una MYPE metalmecánica de Lima Norte [Proposal to improve lean production management through the use of Agile Methodologies and Lean Manufacturing in a metal mechanical MSE in North Lima]	Portugal Picon, David Arturo; Villavicencio Arriola, Manuel Alef; Mercedes Cano; Carlos Raymundo	IHSED2021
Propuesta de mejora del proceso de aprovisionamiento utilizando herramientas de lean manufacturing y cadena de suministro para reducir el costo de ventas de un restaurante [Proposed improvement of the procurement process using lean manufacturing and supply chain tools to reduce the cost of sales of a restaurant]	Figueroa Pomareda, Guido Fabian; Gutierrez Yllu, Luiggi Adan; Mercedes Cano	IHSED2021
Propuesta de mejora para aumentar la rentabilidad de la linea de productos de Atempo mediante las metodologias 5S, ABC, BPM y CRM según el TOGAF [Improvement proposal to increase the profitability of Atempo's product line through the 5S, ABC, BPM and CRM methodologies according to TOGAF]	Jimenez Montejo, Jorge Luis; Llachua Cereceda, Diego Fernando; Cynthia Elías	IHSED2021
Time optimization model for reducing design management time with a Lean Construction approach for small construction companies	Rojas Martins, Guilherme Deyvison Junior; Valverde Salazar, Christian Joel; Raymundo, Carlos; Rojas, Jose	Eircon 2021

Graduate of the Mining Management Engineering program is the first Peruvian to become a member of the Australasian Institute of Mining and Metallurgy (AusIMM)

The Australasian Institute of Mining and Metallurgy (AusIMM) is the peak body and trusted voice for people working in the resources sector. They shape careers, showcase leadership, create communities, and uphold industry standards. Representing a global community from 110 countries, they are committed to supporting people working in all aspects of the mining industry.

AusIMM was founded in 1893 and operates under a Royal Charter. We have a global community of members, branches, and societies, along with influential partnerships with industry, government, education, and the community.

They offer outstanding professional development opportunities including world-renowned mining conferences, leadership events, online learning, and industry news to help build and accelerate careers. We host local and global networking opportunities to connect professionals with common goals and interests and help build their profile.

In January 2021, Pablo Altamirano, graduate of the Mining Management Engineering program, was elected member of the Australasian Institute of Mining and Metallurgy (AUSIMM) and is the first Peruvian to be admitted to the institution.

Additional information is available at: ([link]).

Student of the Mining Management Engineering program is elected President of the National Board of Directors of *AMAUTAS MINEROS*

Amautas Mineros is a civil association made up of volunteer university students from 33 universities in 17 regions of Peru, who share best practices in modern mining to students and communities directly and indirectly affected by mining operations.

In January 2021, Leandro Arrieta, tenth-term student, was elected President of the National Board of Directors of the *AMAUTAS MINEROS*, which groups around 1,000 students from 35 universities in 18 regions of the country. The association seeks to disseminate modern and best practices of responsible mining that are respectful of the environment.

Additional information is available at: ([link])

Students of the Mining Management Engineering program published research papers in different international congresses in 2021

In 2021, students of the Mining Management Engineering program published 21 conference papers in different international congresses. The following table provides a list of the papers, authors, and conferences.

Table 16. List of Research Papers presented at International Congresses (2021)

Title	Authors	Journal / Event
Análisis de la influencia de los esfuerzos activos (Jw/SRF) en el gráfico de estabilidad modificado mediante el algoritmo Gradient Boosting Machine para el diseño de tajeos en minas subterráneas del Perú [Analysis of the Influence of Active Stresses (Jw/SRF) on the Modified Stability Graph Using the Gradient Boosting Machine Algorithm for the Design of Underground Mine Shafts in Peru]	Camacho Cosio, Hernán and Raymundo Ibáñez Carlos Arturo	AHFE2021
Análisis de los factores de diseño en el método de corte y relleno descendente con taladros largos presentes en la caída de roca en una mina subterránea del sur del Perú [Analysis of the Design Factors in the Long-Hole Cut-and-fill Method in the Rockfall in a Underground Mine in Southern Peru.]	Torres Candia, Miguel, Vidal Aramburu Rojas, Edgar Alayo and Arauzo Gallardo, Luis Alberto	IHSED2021

Title	Authors	Journal / Event
Análisis del comportamiento del sistema de sostenimiento en labores con vetas menores a 30° mediante la aplicación de Wood pack en minería subterránea [Analysis of the Behavior of the Support System in Workings with Lodes less than 30° through the Application of Wood pack in Underground Mining]	Saldaña Paredes, Carlos Osmar and Raymundo Ibáñez, Carlos Arturo	AHFE2021
Análisis paramétrico de los factores influyentes en el flujo de aire usando redes neuronales en una mina subterránea del sur del Perú [Parametric Analysis of the Influential Factors in Airflow Using Neural Networks in an Underground Mine in Southern Peru]	Ramos Barrial, Juan José, León Plasencia, Erick Samir and Raymundo Ibáñez, Carlos Arturo	IHSED2021
Aplicación de la técnica de cámaras de aire con caucho reciclado para la evaluación de la fragmentación del macizo rocoso producto de la voladura en los bancos de producción de un tajo abierto en el sur Perú [Application of the Technique of Air Chambers with Recycled Rubber for the Evaluation of Rock Mass Fragmentation caused by Blasting in the Production Benches of an Open Pit in Southern Peru]	Chapoñan Chinchay, Cristhian Andres, Diaz Cueto, Jhonatan Walter and Raymundo Ibáñez, Carlos Arturo	AHFE2021
Aplicación de las Cadenas de Márkov en el análisis de accidentes por desprendimiento de rocas en labores subterráneas [Application of the Chains of Márkov in the Analysis of Rockfall Accidents in Underground Works]	Avila Condori, Lady Joseline, Jara Cespedes, Juan, Vásquez Olivera, Yaneth Charito, Aramburu Rojas, Vidal Sixto and Carlos Raymundo	AIC-2021
Aplicación del Forecast para controlar la ejecución del presupuesto de una estrategia del departamento de comercialización en una empresa minera metálica del Perú ante una crisis del precio del mineral en el mundo [Application of the Forecast to Control the Budget Execution of a Marketing Department Strategy in a Peruvian Metallic Mining Company in the face of a Mineral Price Crisis in the World]	Pillpe Garcia, Cesar Leandro and Raymundo Ibáñez, Carlos Arturo	IHSED2021
Aplicación del método de Janbú para el análisis de estabilidad de taludes con redes neuronales para la prevención del deslizamiento de los bancos en un open pit producto de las precipitaciones [Application of the Janbu Method for Slope Stability Analysis with Neural Networks for the Prevention of Bank Sliding in an Open Pit due to Rainfall]	Castañeda Falla, Carlos Alberto, Dibucho Alfaro, Koseth Simone, Arauzo Gallardo, Luis Alberto and Alayo, Leon Edgard	IHSED2021
Aplicación del modelo ANFIS-PSO para predecir el tamaño de fragmentación de roca producto de la voladura de bancos de producción en una mina superficial [Application of the ANFIS-PSO Model to Predict the Size of Rock Fragmentation Resulting from the Blasting of Production Benches in a Surface Mine]	Torres Ochoa, María Angelica, Vergara Tafur, Betty Adriana and Raymundo Ibáñez, Carlos Arturo	AHFE2021
Diseño de un modelo de mejora continua basado en la integración de la Teoría de Restricciones y Lean Six Sigma aplicable al ciclo de acarreo por medio de camiones en una mina superficial del norte del Perú [Design of a Continuous Improvement Model based on the Integration of the Theory of Constraints and Lean Six Sigma Applicable to the Haulage Cycle by means of Trucks in a Surface Mine in Northern Peru]	Salhuana Barrenechea, Sebastián Javier, Torreblanca Martínez, Jean Pierre Raphael, Alayo León, Edgar Willian, Aramburu Rojas, Vidal Sixto, and Carlos Raymundo	AIC-2021

Title	Authors	Journal / Event
Drilling Mesh Design based on Holmberg's Mathematical Model to Decrease Mineral Fragmentation of Blasting Processes at Underground Mines in Peru	Edy Vasquez, Luis Arauzo, Francisco Dominguez and Raymundo Ibáñez, Carlos Arturo	IJERT
Hydraulic Fill Assessment Model Using Weathered Granitoids Based on Analytical Solutions to Mitigate Rock Mass Instability in Conventional Underground Mining	Portocarrero-Urdanivia C., Ochoa-Cuentas A., Arauzo-Gallardo L. and Raymundo C.	Smart Innovation, Systems and Technologies
Implementación de un sistema alternativo de limpieza de mineral post-voladura con equipos semi mecanizados en una mina subterránea convencional [Implementation of an Alternative System for Mineral Cleaning After Blasting with Semi-Mechanical Equipment in a Conventional Underground Mine]	Espinoza Tuesta, Renato, Diaz Huaina, Guillermo Nicanor and Carlos Raymundo	AIC-2021
Influencia de la activación alcalina del relave minero para el sostenimiento con shotcrete en una mina del centro del Perú [Influence of Alkaline Activation of Mine Tailings for Shotcrete Support in a Mine of Central Peru]	Huacho Contreras, Saac, La Fuente Conga, Jhoseph and Raymundo Ibáñez, Carlos Arturo	AHFE2021
Method for the Identification of Criticality Levels Through Microtectonic and Geotectonic Studies in Surface Outcrops with a Potential Impact on Underground Mining Works	Leon E.C.E., Cisneros M.J.C., Huaina G.N.D., Alvarez H.P. and Raymundo C.	Smart Innovation, Systems and Technologies
Método de Predicción de Estallido de Roca en Minería Subterránea de Gran Profundidad basado en Extreme Learning Machine [Method for the Prediction of Rockburst in Deep Underground Mining based on Extreme Learning Machine]	Carlos Raymundo, Sebastian Pastor-Villanueva and Humberto Pehovaz Alvarez	LACCEI 2021
Metodología de toma de decisión de un sistema de drenaje de aguas subterráneas utilizando el Proceso Analítico Jerárquico (AHP) simplificado en minería superficial [Decision-Making Methodology of a Groundwater Drainage System Using Simplified Analytical Hierarchical Process (AHP) in Surface Mining]	Carlos Raymundo, Fabrizio Bolaños-Contreras and Yaneth Vasquez-Olivera	LACCEI 2021
Modelo Comparativo de las Propiedades Físico-Mecánicas del Shotcrete con contenido de fibras de acero y polipropileno empleado en el sostenimiento de labores mineras subterráneas del Perú [Comparative Model of the Physical-Mechanical Properties of Shotcrete Containing Steel and Polypropylene Fibers Used to Support Underground Mining Works in Peru]	Humberto Pehovaz, Hidalgo Aguirre, Chelín Martínez and Carlos Raymundo-Ibáñez	LACCEI 2021
Modelo de control de la sobrerotura del macizo rocoso aplicando la técnica de voladura controlada con exablock en el tajo de una mina subterránea del Perú [Control Model of the Overburden Control of the Rock Mass by Applying the Controlled Blasting Technique with Exablock in the Pit of an Underground Mine in Peru]	Maguiña Rondan, Dennys Campos Rojas, Bryan Louis, Pehovaz Alvarez, Humberto Iván and Carlos Raymundo	AIC-2021
Modelo de Ecuaciones Estructurales para el análisis de accidentes basado en el Sistema de Clasificación de Factores Humanos en minas subterráneas del Perú [Structural Equation Model for Accident Analysis based on the Human Factors Classification System in Underground Mines in Peru]	Carlos Raymundo, Fiorella Romero-Ramos, Jeferson Trujillo-Torres and Vidal Aramburú-Rojas	LACCEI 2021

Title	Authors	Journal / Event
Modelo de Mantenimiento Predictivo basado en el Análisis del Dispatch para el Incremento de la Utilizacion Efectiva [Predictive Maintenance Model based on Dispatch Analysis to Increase Effective Use]	Luis Arauzo Gallardo, Pedro Alcarraz-Rojas, Fabiola Legoas-Farias and Carlos Raymundo-Ibañez	LACCEI 2021
Modelo hidrogeológico basado en el método numérico de profundización, aplicando la técnica Back Propagation Neural Network para la evaluación de grandes filtraciones de agua en el interior de una mina subterranea del Perú [Hydrogeological Model based on the Numerical Deepening Method, by Applying the Back Propagation Neural Network Technique for the Evaluation of Large Water Seepage inside an Underground Mine in Peru]	Carlos Raymundo, Zulema Castro-Francia, Pier Jeri-Blas and Humberto Pehovaz	LACCEI 2021
Optimized Acidic Water Treatment Method using Quicklime, Fly Ash and Aluminum Hydroxide and the Monte Carlo Simulation under a Theoretical Chemical Testing Approach to Neutralize Acidity in a Polymetallic Underground Mine	Kevinstiv Castro-Huaman, Yaneth Vasquez, Vidal Aramburu-Rojas, Francisco Dominguez and Raymundo Ibáñez, Carlos Arturo	IJERT
Propuesta para minimizar la dilución en vetas angostas mediante el ajuste de la carga explosiva en taladros largos de una mina subterránea al sur del Perú [Proposal to Minimize Dilution in Narrow Lodes by Adjusting the Explosive Charge in Long Boreholes of an Underground Mine in Southern Peru]	Huamaní Ancco, Karina Andrea, Mamani Linares, Lucero Carol, Diaz Huaina, Guillermo Nicanor, Arauzo Gallardo, Luis Alberto and Carlos Raymundo	AIC-2021
Rock Mass Classification Method Applying Neural Networks to Minimize Geomechanical Characterization in Underground Peruvian Mines	Julyans Brousset-Cornejo, Humberto Pehovaz-Alvarez, Francisco Dominguez and Raymundo Ibáñez, Carlos Arturo	IJERT
Simulación de ley de corte fija y ley de corte variable aplicado en el proceso de evaluación a largo plazo en una mina a tajo abierto en el sur del Perú [Simulation of Fixed Cut-off Grade and Variable Cut-off Grade applied in the Long-term Evaluation Process in an Open-pit Mine in Southern Peru]	Flores Zuñiga, Elmer Jair; Rivera Ascencios, Diego Alonso and Raymundo Ibáñez Carlos Arturo	AHFE2021
Vertical Tailings Method applying Surface Paste Disposal to Minimize Land Space Waste from Water in Polymetallic Mining in Peru	Renato Guzman, Karla Borjas, Yaneth Vasquez, Vidal Aramburú and Francisco Dominguez and Raymundo Ibáñez Carlos Arturo	IJERT

Graduate of the Information Systems Engineering program started an MBA at the Business School of the University of Oxford, focusing on entrepreneurship and sustainable development

In July 2021, Jason Pareja, graduate of the School of Information Systems Engineering began an MBA at the renowned Saïd Business School at Oxford University, focusing on entrepreneurship and sustainable development. In addition, Jason has been leading the Oxford Latin American Business Club, seeking to promote the culture and identity of the region and foster business opportunities.

Jason is studying with students from 89 nationalities to focus on creating new business opportunities to increase the growth rate of the start-up ecosystem in Latin America.

Figure 47. Jason Pareja, graduate of the Information Systems Engineering program.

Graduate of the Information Systems Engineering program has become the first Peruvian to become part of the IIA DC Board of Directors in the United States

Jessica Echenique, graduate of the Information Systems Engineering program (2006), became the first Peruvian to become part of the IIA DC Board of Directors in the United States in July 2021. Jessica is a member of the Board of Directors of the #IIADC Chapter, SCRUM Master, CISA, CISM and is a senior auditor for the Inter-American Development Bank with more than 17 years of professional experience in the financial mining, oil, gas, and telecommunications industries. She also works for Multilateral Development Institutions that support development in Latin America.

Figure 48. Jessica Echenique, graduate of the Information Systems Engineering program.

Students of the Information Systems Engineering program presented papers at the LACCEI International Multi-Conference of Engineering, Education and Technology

LACCEI is a non-profit organization of Latin American and Caribbean (LAC) institutions that offer academic programs in Engineering and Technology as well as institutions (i.e. universities, colleges, schools and businesses) from other parts of the world that have demonstrated interest and activities with LAC institutions.

The following papers from the Information Systems Engineering program were accepted and presented at the 19th LACCEI International Multi-Conference for Engineering, Education, and Technology indexed Scopus and Springer. The following papers were co-authored internationally.

Table 17. List of research papers presented at the LACCEI International Multi-Conference of Engineering, Education and Technology

PAPERS	AUTHORS	
Comprehensive Monitoring Police System to Manage the Complaint Process on Gender Violence in Peru	UPC Students: Jean Marco Silva Bocángel Diego Daniel Ochoa Yañez UPC Faculty: Jimmy Armas	International Faculty: Paola A.González, Dalhousie University, Canada
Assistive Technology to Monitor and Reduce Anxiety Levels among College Students throughout the Analysis of Heartbeat Frequency	UPC Students: Carlos Gerald Angeles La Torre Dennis Armando Angeles La Torre UPC Faculty: Jimmy Armas	International Faculty: Paola A.González, Dalhousie University, Canada
Wireless Uterine Contractions Monitoring System for Pregnant Women Using a Low-cost Integrated Sensor Network	UPC Students: Aarón Israel Flores La Chira Ricardo Enrique Malqui Torres UPC Faculty: Jimmy Armas	International Faculty: Paola A.González, Dalhousie University, Canada

INSTITUTIONAL STUDENTS' ACHIEVEMENTS

a) UPC won three international Catalyst Awards for the third consecutive year

Since 2005, the Catalyst Awards have recognized and awarded innovation and excellence in the global Blackboard community, where millions of educators and students work every day using cutting-edge technology. The winners have been selected by a cross-functional team of Blackboard experts who are the best in their field.

Within the context of the COVID-19 pandemic, UPC was the first to offer the 2020-1 term fully online. This way, thousands of students were able to adjust to a modern way of studying through the Blackboard platform, with which it has been working for 8 years. And, for the third consecutive year, UPC has won the Blackboard Catalyst Awards in two categories: Leading Change and Teaching and Learning.

Leading Change recognizes institutions that are at the forefront of educational innovation, as it recognizes campuses/sites that have developed high-impact educational strategies. In addition, UPC has

implemented and adopted innovative strategies with the potential to increase student success rates in Peru.

UPC's winning team consisted of Jorge Bossio, Silvana Balarezo, Juan Nazario, Manuel Bazalar, Diego Nue, Isabel Arana, Edson Cocha, Bruno Chacón, Jorge Ramírez and Cleofe Vergara, from the Educational Innovation department.

Additional information is available at: ([link](#)).

b) Joaquín Vargas and Nicolás Pacheco, both UPC students, participated in the Tokyo 2020 Olympic Games

UPC seeks excellence in sports without neglecting the academic aspect; therefore, the University supports more than 700 athletes from various disciplines through sports scholarships and comprehensive academic and emotional support programs.

On this occasion, students Joaquín Vargas, from the Industrial Engineering program and Nicolás Pacheco from the Administration and Agribusiness program were recognized for being part of the 35 Peruvian athletes who participated in the Tokyo 2020 Olympic Games.

Joaquín Vargas represented Peru in swimming, and Nicolás Pacheco, shooting for the second time.

Additional information is available at: ([link](#)).
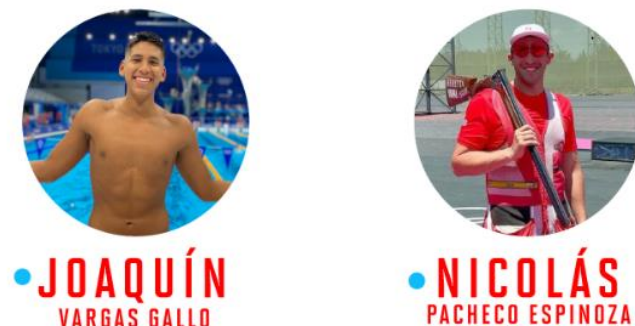
Figure 49. Joaquín Vargas and Nicolás Pacheco

c) UPC's Wushu - Taolu Team won the national university championship

The University Sports Federation of Peru (FEDUP), with the sponsorship of the Peruvian Institute of Sports (IPD), organized the 2021 National Online University Wushu - Taolu Open Championship.

UPC's Wushu - Taolu Team won first place in the championship with 51 points. The championship was held on June 12 and 13 in presence of 101 participants, including officials and athletes from 12 institutions across the country.

The event was broadcasted nationwide, thanks to the transmission of the University Sports Federation of Peru through its FanPage and YouTube channel.

Figure 50. Poster of National Online University Wushu - Taolu Open Championship (2021).

d) UPC's Taekwondo - Poomsae team won the 2021 National Online University Open Championship

UPC's Taekwondo team won first place in the 2021 National Online University Taekwondo - Poomsae Open Championship, a tournament organized by the University Sports Federation of Peru (FEDUP).

The competition took place on May 29-30 with the participation of 26 universities from all over the country, and in which 288 athletes competed. UPC's team, guided by the effort and dedication of coach Regina Quicano, achieved a final score of 1,110 points, winning first place.

Figure 51. UPC's Taekwondo Team - Poomsae, winner of the national championship.

e) UPC won National University Weightlifting Champion in the 2021 Open Tournament

On June 3-4, the Peruvian University Sports Federation (FEDUP) held the National University Online Weightlifting Open Championship. A total of 11 universities at national level and more than 100 students took part in the event.

UPC's team has been training very hard since 2020, adapting their sessions to the online modality in the best possible way. Despite the first few challenges, the team led by Professor David Palacios showed great resilience and adaptability to overcome this situation and prepare in their respective disciplines.

Despite the pandemic, the athletes showed a very high level of endurance, as many national university records were broken. At the end of the championship, UPC's team regained the title of National University Champion, scoring 1,476 points.

The entire team demonstrated an excellent performance, highlighting the following results:

- Agustín Freyre, student of the Physical Therapy program, who competed in the 67 kg division and won gold by breaking three national university records in the snatch division by lifting 88 kg, the clean and jerk division by lifting 110 kg, with a total record of 198 kg.
- Mateo Rentería, student of the Information Systems Engineering program, who competed in the 73 kg division and won gold, by breaking three national university records in the snatch division by lifting 100 kg, the rebound division by lifting 134 kg, with a total record of 234 kg.
- Frank Marmanillo, student of the Psychology program, who competed in the 81 kg division and won gold, by breaking two national university records in the snatch division by lifting 116 kg, with a total record of 257 kg.
- Miguel Lescano, student of the Physical Therapy program, who competed in the 102 kg division and won gold, by breaking three national university records in the snatch division by lifting 108 kg, in the rebound division by lifting 145 kg, with a total record of 253 kg.
- Manuel Figueroa, student of the Nutrition and Dietetics program, who competed in the 96 kg division and won silver, by breaking the national university record in the rebound division by lifting 146 kg.

f) The Chess National Team won the 2021 National University Online Chess Open Championship

On June 26, the University Sports Federation of Peru (FEDUP) held the 2021 National University Online Chess Open Championship. A total of 32 institutions at national level and more than 300 students took part in the event.

The team led by Master Dante Soto included young and experienced chess players, some of them among the most outstanding national players. The championship was of a very high level, with many FIDE Masters and some International Masters in representation of their institutions. UPC's team obtained the National Sub-Championship title, scoring 37 points in the general table.

With regard to UPC's team, the most outstanding players included Carlos Huarcaya who scored 7 points and Ann Chumpitaz who scored 6.5 points. See below the board scores per student:

- Carlos Huarcaya, student of the Industrial Engineering program - 7 pts
- Ann Chumpitaz, student of the Civil Engineering program - 6.5 pts
- Heidy García, student of the Sports Business and Administration program - 6 pts
- Marco Delgado, student of the Economics and Finance program - 6 pts
- Luis Lindo, student of the Educational and Pedagogical Management program - 6 pts
- Luis Flores, student of the Civil Engineering program - 5.5 pts

Figure 52. UPC's team obtained the National Sub-Championship title

g) UPC's team represented the official 2021 FEDUP E-Sports tournaments

UPC's team won the 2nd edition of UPC E-Sports Tournaments 2021. After winning the Intramural tournament, the team represented UPC in the official 2021 FEDUP E-Sports tournaments. UPC's team was made up of the following students.

Table 18. List of UPC's team who won the 2nd edition of UPC E-Sports Tournaments (2021)

STUDENTS	PROGRAM
Rafael Lara	Banking and Financial Administration
Luis Cohello	Psychology
Josten Huaman	Administration and Marketing
Leonardo Aguilar	Administration and Finance
Alexander Chero	Business Administration

Figure 53. Poster of the event.

h) UPC won the National University Karate Championships - Kata

On Saturday, June 19, the University Sports Federation of Peru (FEDUP) held the National University Karate Championship organized online.

More than 20 institutions and 146 university athletes took part in the event organized online and broadcasted online. The competitors demonstrated their different Karate Kata techniques. The competition categories were novice, intermediate and advanced, divided into women and men, respectively.

A total of 11 students represented UPC and won a total of 2 gold medals, 1 silver medal and 3 bronze medals.

The effort and perseverance of each student before and during training at home allowed the university to win the championship by earning 11 points.

UPC athletes who won medals were:

- Alisson Limo, student of the Industrial Engineering program, gold medal, in novice women.
- Sarah Bayona, student of the Law program, bronze medal in novice women.
- Max Solis, student of the Information Systems Engineering program, silver medal in novice men.
- Erick Guerra, student of the Administration and Marketing program, bronze medal in novice men.
- Antonella Blanco, student of the Law program, gold medal in advanced women.
- Evenly Grandez, student of the Nutrition and Dietetics program, bronze medal in advanced women.

Figure 54. Evenly Grandez, student of the Nutrition and Dietetics program during a competition.

i) Student of the Administration and Finance program achieved good performance at the World Rowing Junior Championship

Francesca Gardella Bozzo, student of the Administration and Finance program, obtained 11th place, and was the second best South American in the World Rowing Junior Championship.

"Obtaining 11th place is very gratifying for me. It puts Peru on the map, and it also allows me to realize that the sacrifices I have been making are paying off. However, I do not feel satisfied, and I will continue training to win a medal next year," said Francesca. (Source: link).

Figure 55. Francesca Gardella Bozzo, student of the Administration and Finance program.

j) UPC won the 3rd Virtual Karate Cup UPC

On October 2, UPC organized the 3rd UPC Virtual Karate Cup. The event was attended by 11 universities from all over the country:

- *Universidad Peruana de Ciencias Aplicadas (UPC)*
- *Universidad de Lima*
- *Universidad Tecnológica del Perú*
- *Universidad Andina del Cusco*
- *Universidad César Vallejo*
- *Universidad Nacional Agraria La Molina*
- *Universidad Nacional Federico Villareal*
- *Universidad Nacional Tecnológica de Lima Sur*
- *Universidad Ricardo Palma*
- *Universidad Nacional Rodrigo Toribio de Mendoza and*
- *Universidad Señor de Sipán*, with a total of 85 athletes.

The competition was developed online and broadcasted live – the transmission was in charge of the audiovisual team of the production company uGamer –, which provided a great experience to the participants and spectators. Likewise, the referees of the Peruvian Karate Federation were in charge of evaluating the participants and guaranteeing an impartial and transparent competition for all the institutions that took part in the tournament.

The coach of the National Karate Team, Jimmy Moreno, expert in the Kata modality and World and Pan-American medalist, participated in the event as a commentator, both in his role as an athlete and a coach.

Even though the event took place online, UPC's team recorded their best katas in the facilities of the Villa site, complying with all the sanitary protocols.

This championship allowed preparing UPC's team for the National University Championship, which was held on October 23.

Outstanding participations include:

- Erick Guerra Cahuana, student of the Administration and Marketing program - Men's Novice Champion.
- Gabriela Lopez Bendezú, student of the Medicine program - Women's Novice Champion.
- Escarlet Carrillo Pariona, student of the Environmental Engineering program - Women's Intermediate Champion.
- Evenly Grandez Torres, student of the Nutrition and Dietetics program - Women's Advanced Champion.

k) UPC students were selected for the National Women's and Men's Hockey National Teams and qualified to the 2022 Pan American Cup

Daniela Ramírez and Angelov Contreras, both students of the Civil Engineering program, and Gianfranco Curo, student of the Sports Business and Administration program, and members of the National Women's and Men's Hockey Team qualified for the 2022 Pan American Cup.

Students Angelov Contreras and Gianfranco Curo, representing Peru, won silver.

Figure 56. Students who were selected for the National Women's and Men's Hockey National Team, qualified for the 2022 Pan American Cup.

l) Student of the Sports Business and Administration program participated in the World Longboard Circuit

The World Surf League (WSL) is the body that regulates professional surfing competitions every year. The World Surf League includes the Championship Tour, the Qualifying series, the Big Wave Tour, the Longboard Tour, and the Junior Tour.

Lucas Garrido Lecca, student of the Sports Business and Administration program, achieved 5th place in the Cuervo Surf Ranch Classic, World Longboard Circuit, in which the 18 best surfers in the world took part. Lucas ranked 8th in the world ranking.

Figure 57. Lucas Garrido Lecca, UPC student who participated in the World Longboard Circuit.

m) UPC won the University Taekwondo Tournament.

The Universidad Peruana de Ciencias Aplicadas (UPC) won first place in the online 2021-2 National University Taekwondo Championship. The event was held by the University Sports Federation of Peru (FEDUP) on October 16-17, in the Poomsae modality and was broadcasted live on FEDUP's social networks.

Thanks to the supervision and support of coach Regina Quicaño and her technical team, the team won 9 gold medals, 9 silver medals and 11 bronze medals, with which they were able to win once again the national university title.

The event was attended by 29 institutions and 285 students from all over the country. UPC achieved 1,750 points in the two days of competition; thus winning the championship.

Champions in their respective categories included:

Advanced:

- Danes Ranking Category
  Women's: Carmela De La Barra, student of the Communication and Journalism program
  Men's: Hugo Del Castillo, student of the Medicine program
- Koryo Category
  Men's: Alonso Copa, student of the Communication and Marketing program
- Pal Jang Category
  Women's: Paola Castillo, student of the Architecture program

Men's: Mauricio De La Cruz, student of the Sports Business and Administration program
- **Chil Jan Category**
  Women's: Sayuri Huarcaya, student of the Administration and International Business program

Novice:

- **Oh Jang Category**
  Men's: Luis Tataje, student of the Nutrition and Dietetics program
- **Sam Jang Category**
  Women's: Angie Orihuela, student of the Dentistry program
- **Il Jang Category**
  Women's: Nicole Sanchez, student of the Physical Therapy program

n) UPC won the 2021-2 National Online University Chess Championship

The 2nd annual edition of the 2021-2 National Online University Chess Championship was held on October 2, 2021. This event, organized by the University Sports Federation of Peru (FEDUP), is the most important for the academic community where both universities and the armed forces, officers and non-commissioned officers schools, and institutes of higher education to compete against each other.

The championship was carried out individually for both men and women, by applying the Swiss pairing system of eight rounds in each tournament. At the end of each round, the four best individual scores in the men's division and the two best individual scores in the women's division were added together and gave the final accumulated score for each institution.

UPC's team won the national champion, regaining the title it had won in the first term of 2020. The team led by coach Dante Soto showed a very high level of play, demonstrated by the following students:

Women's:

- Ann Chumpitaz, student of the Civil Engineering program
- Stephanie Puppi, student of the Information Systems Engineering program

Men's:

- Marco Delgado, student of the Economics and Finance program
- Luis Flores, student of the Civil Engineering program
- Leonardo Higa, student of the Administration and Marketing program
- Pietro Minaya, student of the Software Engineering program

UPC's final score was 39 points. The *Universidad Nacional Mayor de San Marcos* won second place with 35.5 points and the *Pontificia Universidad Católica del Perú* third place with 34.5 points.

Figure 58. Screenshot of the 2021-2 National University Online Chess Championship.

o) UPC students were awarded the ELAP scholarship

The Emerging Leaders in the Americas Program (ELAP) - Canada scholarships provide students from post-secondary institutions in Latin America and the Caribbean with short-term exchange opportunities to study or conduct research at Canadian post-secondary institutions at the undergraduate, graduate, and post-graduate levels.

The scholarship recipients will be given the opportunity to study for one semester at prestigious universities in Canada. UPC students who won the scholarship include:

- Amanda Quispe, student of the Working Adult (EPE) Business Administration program
- Diana Torres, student of the Professional Translation and Interpreting program
- Valerie Salas, student of the Communication and Publicity program
- Emilio Paredes, student of the Electronic Engineering program

Additional information is available at: ([link](#)).

p) UPC students took part in the University CADE 2021

The University Annual Executive Conference (CADE), organized by the business association IPAE, provides a three-and-a-half day event for reflection, inspiration and action in order to inspire and promote young leaders to take action and contribute to the development of Peru, improve their understanding of the country's reality, and connect participants among their peers and leaders from other generations.

In 2021, University CADE's main topic allowed students to delve into their role as agents of change in the construction of a newer version of their country by focusing on research, economics, education, equity, and gender.

Participants also responded to the question: "What would you do to contribute to the construction of the country?" Participants mentioned that they were willing to contribute on a basis of knowledge,

experiences, and fields of specialty to the different perspectives that complement and promote development. All this was done with professionalism, empathy, and inclusion.

UPC students, who represented UPC at this important event, include:

- Alejandra Delgado, student of the Audiovisual Communication and Interactive Media program
- Alicia Soto, student of the Economics and Finance program
- Álvaro Cruzado, student of the Economics and International Business program
- Andrea Alvarez, student of the Communication and Corporate Image program
- Anthony Carhuaz, student of the Communication and Corporate Image program
- Bárbara Navarro, student of the Architecture program
- Camila Garrido Lecca, student of the Communication and Marketing program
- Christian Del Aguila, student of the Music program
- Cristina Rojas, student of the Administration and Marketing program
- Daniel Prialé, student of the Environmental Engineering program
- Diana Paredes, student of the Professional Translation and Interpreting program
- Fernando Ramirez, student of the Administration and Marketing program
- Francisco Blanco, student of the Music program
- Franco Mc Dowall, student of the Communication and Publicity program
- Gabriel Santiago, student of the Economics and Finance program
- Gemma Valdivieso, student of the Tourism and Administration program
- Grecia Saguma, student of the Environmental Engineering program
- Helen Miranda, student of the Professional Translation and Interpreting program
- Itala Comissi, student of the Architecture program
- Javier Llosa, student of the Communication and Marketing program
- Jayro Fernandez, student of the Accounting and Administration program
- Jefferson Ledesma, student of the Sports Business and Administration program
- Juan Quintana, student of the Communication and Marketing program
- Karla Minaya, student of the Environmental Engineering program
- Hiroko Beraun, student of the Audiovisual Communication and Interactive Media program
- Lucero Vasquez, student of the Environmental Engineering program
- Luciana Reategui, student of the Environmental Engineering program
- Mariajosé De Jesús González, student of the Audiovisual Communication and Interactive Media program
- Melissa Zuñiga, student of the Law program
- Nilton Mercado, student of the Computer Science program
- Olenka Calderon, student of the Audiovisual Communication and Interactive Media program
- Rodrigo Alejandro, student of the Medicine program
- Ruben Ruiz, student of the Audiovisual Communication and Interactive Media program.
- Viviana Cáceres, student of the Law program
- Willy Vera, student of the Tourism and Administration program

II.   **Student Learning Results**

UPC's Educational Model provides guidance to design each program's curricular plan as well as a structure for the courses in order to allow the students to gradually develop the graduate profile at level 3 of each learning outcome for undergraduate programs, and at level 4 for graduate programs. The performance levels are defined as follows: beginner (level 1), intermediate (level 2), and advanced (level 3), as well as expert (level 4) for graduate programs.

The graduate profile, as defined for each program, incorporates UPC's 7 institutional learning outcomes: (1) Oral Communication, (2) Written Communication, (3) Critical Thinking, (4) Innovative Thinking, (5) Quantitative Reasoning, (6) Information Literacy and (7) Citizenship, as well as program learning outcomes.

UPC's Educational Quality department, through its Curriculum Development and Assessment area, in coordination with a Committee of Experts, is responsible for evaluating each institutional learning outcome (ILO). Said Committee of Experts is also responsible for developing rubrics, designing, and defining the method to measure the level of achievement of each learning outcome, as well as the instrument, tools and sample size. The sample must be representative and reliable with respect to the target population.

The evidence collected is assessed by an evaluation committee, selected by the Curricular Development and Assessment area and the Committee of Experts, in the case of institutional learning outcomes, and by the program's Academic Director, in the case of program learning outcomes.

Upon analyzing the results of each institutional and program learning outcome, an action plan is defined.

In the case of institutional learning outcomes, the Curriculum Development and Assessment area and the Committee of Experts defines institutional actions that will contribute to improving the students learning outcomes. In the case of program learning outcomes, each program's Assessment Committee, made up of faculty members and the Academic Director, must prepare an improvement plan for each learning outcome.

The monitoring of compliance with the action plans and assessment results is evaluated through multiple mechanisms, as defined in the University's Integrated Quality System (SICA). The monitoring processes include: (1) program reviews; (2) internal and external audits; (3) self-evaluation processes for accreditation purposes; and (4) meetings with the Curriculum Development and Assessment area.

Continuity of the Assessment Process throughout the COVID-19 Pandemic

UPC has continued to successfully develop the assessment process of learning outcomes throughout the COVID-19 pandemic. The University's experience in the use of digital tools and resources to assist the educational process, allowed to successfully continue implementing the scheduled assessments.

As of 2020-2, the assessment of institutional learning outcomes at the undergraduate level was carried out on the Blackboard platform. Student evidence was collected through the Virtual Classrooms and evaluated on said platform by a committee of evaluators. A committee of evaluators, made up of faculty members with expertise in each learning outcome and previously selected for evaluation purposes, was set up for institutional learning outcome.

In the case of assessment processes of program learning outcomes, which are still being incorporated into Blackboard, the evidence was collected by faculty members at the end of each course and sent to the committees of evaluators via email in order to analyze the results.

2.1 Results of Institutional Learning Outcomes at the Undergraduate Level

UPC's Assessment Plan has been developed in order to consolidate a systematic process that collects, reviews and analyzes evidence of the level of achievement of each learning outcome. The latter contributes to promoting continuous improvement among students and to consolidate the evaluation process in order to improve the effectiveness and quality of the different processes involved in the development of learning outcomes by students.

Table 19 shows the schedule of the evaluation cycles for institutional learning outcomes at the undergraduate level.

Table 19. Schedule of the Evaluation Cycles for Institutional Learning Outcomes - Undergraduate Programs

| First Cycle	Second Cycle	Next Cycle	Institutional Learning Outcome
2014-2	2017-2	2023-1	Written Communication
2015-1	2018-1	2024-1	Information Literacy
2015-1	2019-1	2025-1	Quantitative Reasoning
2015-2	2019-2	2023-1	Oral Communication
2016-2	2020-2	2024-1	Critical Thinking
2016-2	2021-2	2026-1	Citizenship
2017-2	2022-2	2027-1	Innovative Thinking

Regarding the results of the evaluations at the undergraduate level, see below the results of each institutional learning outcome, updated to December 2021.

Assessment Results: Critical Thinking

The second assessment cycle of the institutional learning outcome of Critical Thinking was carried out in 2020-2 in the different courses assigned by each program. Levels 1, 2 and 3 of the rubric were evaluated. Based on this information, a proportionate stratified probability sampling method was used to guarantee the representativeness of the results. The sample comprised 2,215 students at level 1, 2,450 at level 2, and 1,817 at level 3 in order to assess proficiency. Figure 59 shows the overall results per dimension for said learning outcome at level 1, Figure 60 at level 2 and Figure 61 at level 3.
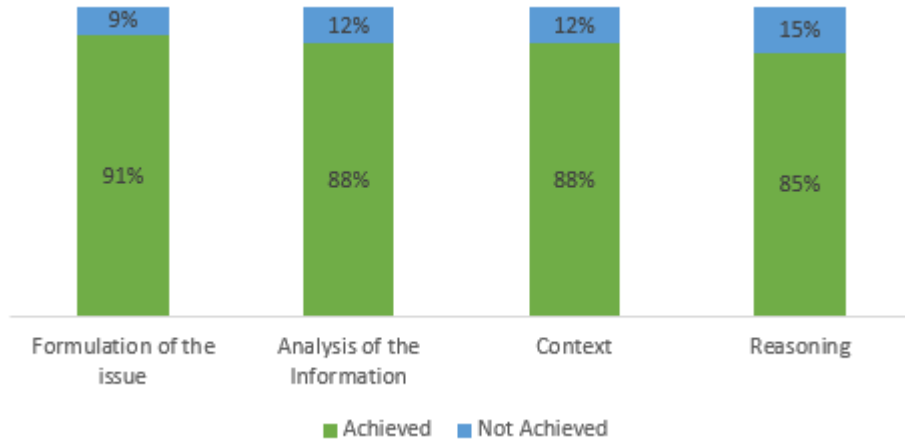
Figure 59. Institutional Learning Outcome of Critical Thinking (Level 1) - Overall Results per Dimension.
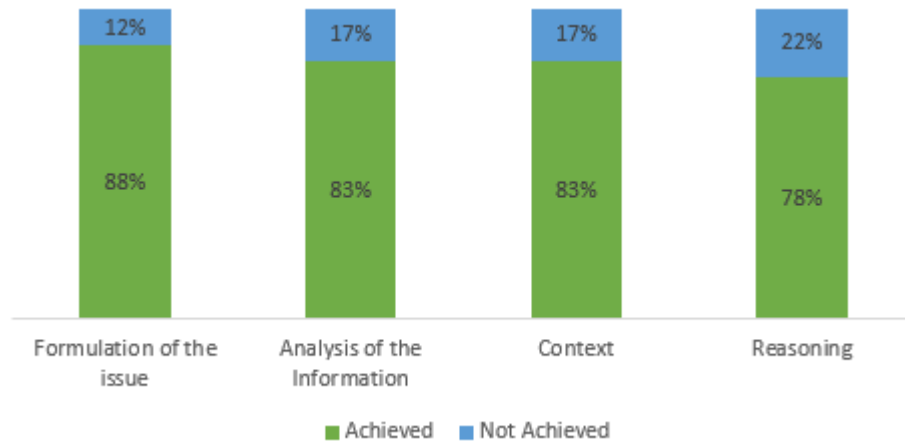
Figure 60. Institutional Learning Outcome of Critical Thinking (Level 2) - Overall Results per Dimension.
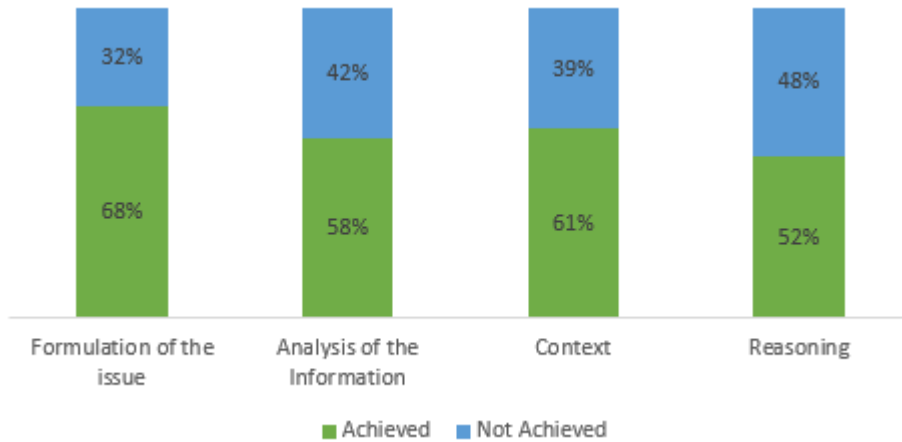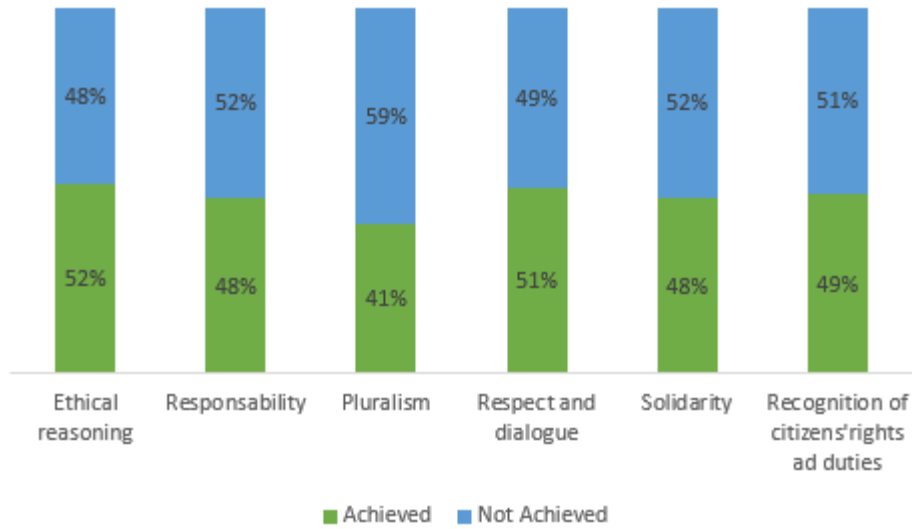
Figure 61. Institutional Learning Outcome of Critical Thinking (Level 3) - Overall Results per Dimension.

The results at level 1 and 2 show that more than 75% of the students reached the expected level in each dimension. At level 3, opportunities for improvement were identified, which will be included in the action plan of the institutional learning outcome. Some of the improvement actions proposed by the Faculty Committee in charge of evaluating the learning outcome included:

- To design and conduct a workshop in order to improve the instructions and evidence.
- To establish a space for counseling in order to review the instructions and evidence.
- To select students at level 1, 2 and 3 who have not achieved the proficiency level in the 2022-2 evaluation cycle and follow up on the progress of the students.
- To link the sample to a census survey for programs with lower percentages of students in order to achieve a more representative sample.
- To carry out a comparative analysis between the students' results in the assessment process and the grades obtained in the evaluation activities selected as evidence.

Assessment Results: Citizenship

The first assessment cycle of the institutional learning outcome of Citizenship was carried out in 2016-2 in the different courses assigned by each program. Levels 2 and 3 of the rubric were evaluated. Based on this information, a stratified probability sampling method was used to guarantee the representativeness of the results. The sample comprised 580 students at level 2 and 474 at level 3 in order to assess overall proficiency. Figure 62 shows the overall results per dimension of said institutional learning outcome at level 2 and Figure 63 at level 3.

Figure 62. Institutional Learning Outcome of Citizenship (Level 2) - Overall Results per Dimension.
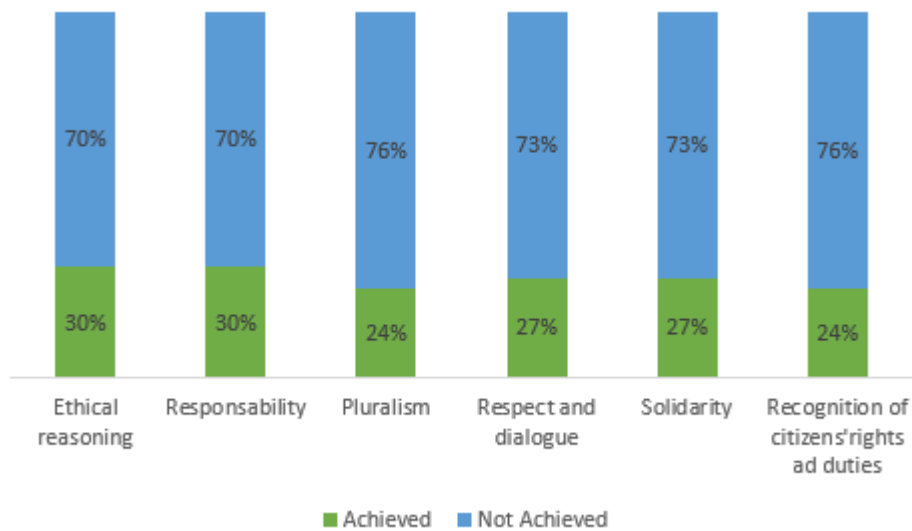
Figure 63. Institutional Learning Outcome of Citizenship (Level 3) - Overall Results per Dimension.

Upon analyzing the results, the committee of faculty members in charge of evaluating the institutional learning outcome identified the following improvement actions:

- The rubric for evaluating the institutional learning outcome must be redefined and the "Solidarity" dimension should be renamed "Solidarity Perspective" in order to take into account the importance of acting in a collaborative spirit and/or seeking collaborative support for the common good when evaluating the institutional learning outcome. The new rubric was disseminated among the different programs and students, and is available at: link.

- The instruments and evaluation mean to assess said institutional learning outcome were redefined in accordance with the new rubric so as to ensure that the assessments include an ethical dilemma of the students' daily lives, which is relevant to each program and level. Based on this recommendation, the University coordinated directly with the Humanities department, as the courses it teaches are articulated with the institutional learning outcome and are taught in all undergraduate programs. This is the case of the Ethics and Citizenship course, whose curriculum was redesigned so as to ensure that the institutional learning outcome is developed while meeting the outcome levels defined in the new rubric.

As part of the continuous improvement process and to ensure the relevance of the proposed improvement actions, a process of control evaluation was carried out in different courses at all three levels in order to validate the rubric and improve the process of evidence collection. It was concluded that the new rubric is relevant. The University decided to approve the application of the new rubric in the next assessment cycle in 2021-2.

To date, the second assessment cycle is being implemented and the following stages of the process have been completed:

- Approval of the rubric and dissemination among all programs.
- Selection of the courses in which the evidence for assessment was collected. Program Directors were in charge of the selection process.
- Training workshops for coordinators and faculty members of the selected courses on how to use the rubric.
- Advisory sessions for course coordinators and faculty members for the review or design of the evidence for the assessment.
- Definition of the sample size to guarantee the representativeness of the results.
- Collection of evidence on Blackboard, through the Virtual Classrooms of the selected courses.

At present, the evidence is being evaluated on Blackboard by an evaluation committee of faculty members with expertise in the learning outcome and the final results will be available as of the first term of 2022.

Assessment Results: Innovative Thinking

In 2017-2, the assessment of the institutional learning outcome of Innovative Thinking at all three levels was carried out based on the evaluation of the sample. To do so, the University determined which programs would participate in the process, the courses in which the institutional learning outcome would be assessed, the type of evaluation means, and the schedule for collecting evidence.

A stratified probability sampling method was used to guarantee the representativeness of the results. The sample comprised 3,296 students, of which 1,259 students at level 1, 1,111 at level 2, and 926 at level 3.

Course coordinators and the Academic Records Office of each campus/site participated in the collection of evidence, both physical and digital. Each program appointed an Evaluation Committee in order to evaluate the evidence. The faculty members attended meetings to validate the calibration process to ensure the objectivity of the evaluation.
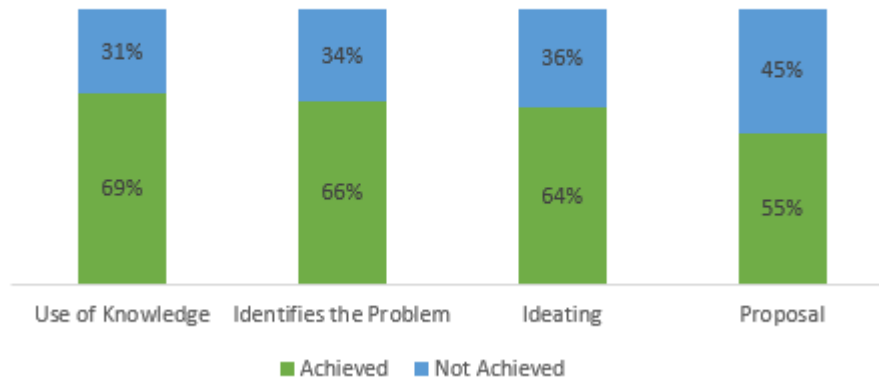
Figures 64, 65 and 66 show the results of the institutional learning outcome at levels 1, 2 and 3, respectively.
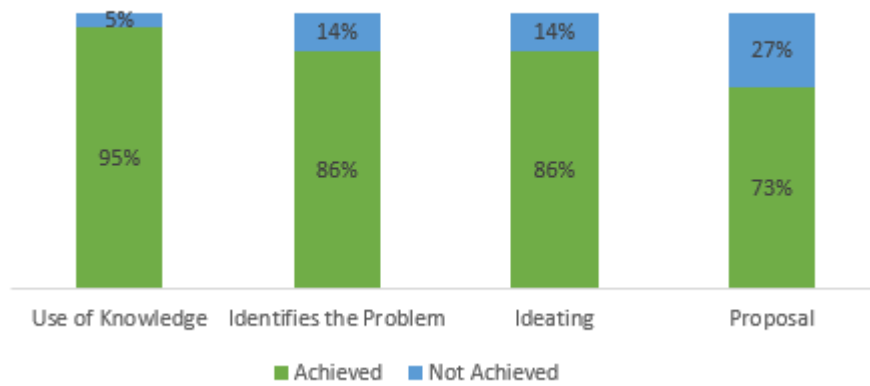
Figure 64. Institutional Learning Outcome of Innovative Thinking (Level 1) - Overall Results per Dimension.
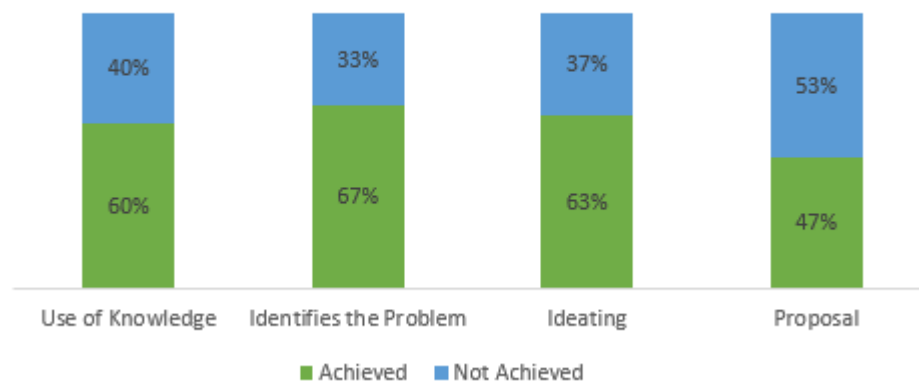
Figure 65. Institutional Learning Outcome of Innovative Thinking (Level 2) - Overall Results per Dimension.

Figure 66. Institutional Learning Outcome of Innovative Thinking (Level 3) - Overall Results per Dimension.

Upon analyzing the results, the committee of faculty members in charge of evaluating the institutional learning outcome of Innovative Thinking identified the following improvement actions:

- To appoint a Committee of Experts to review the dimensions of the rubric that require redesign. To make the necessary adjustments according to the level of each school and program and select individual assessments in order to collect evidence that is relevant to the assessment.

The next assessment cycle of the institutional learning outcome of Innovative Thinking at all three levels will be implemented in 2022-2.

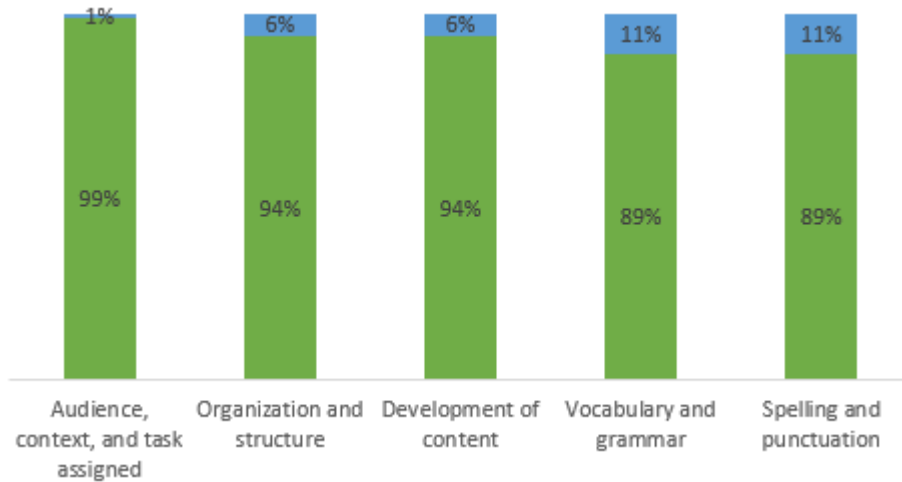**Assessment Results: Written Communication**

As a result of the first assessment cycle of the institutional learning outcome of Written Communication in 2014-2, the University identified, among other opportunities for improvement, the need to review and update the rubric of the institutional learning outcome, in particular with respect to the "Organization and Structure" dimension at level 4. The updated rubric was implemented in the second assessment cycle in 2017-2.

The institutional learning outcome of Written Communication was assessed at levels 2 and 3 based on a representative sample of evidence developed by students in different courses in which the assessment took place.
Based on this information, a stratified probability sampling method was used for the assessment of said institutional learning outcome in 2017-02 so as to ensure the representativeness of the results. The sample consisted of 1,225 students at level 1, 1,181 at level 2, and 939 at level 3 to assess said institutional learning outcome. This represents 53 programs at level 1, 48 at level 2, and 43 at level 3. The coordinators of each program and the Academic Records Office of each campus/site participated in the evidence

collection process.

Figures 67, 68 and 69 show the results for the learning outcome at level 1, 2 and 3, respectively.
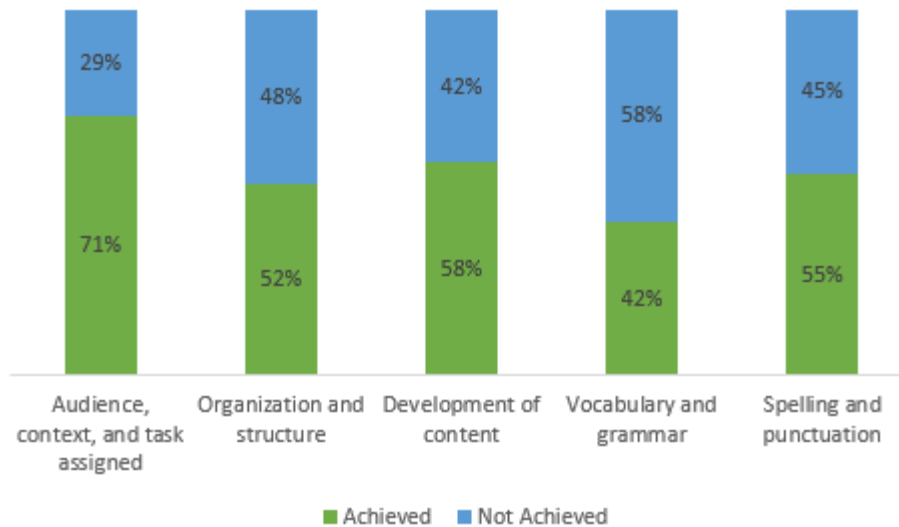

Figure 67. Institutional Learning Outcome of Written Communication (Level 1) - Overall Results per Dimension.
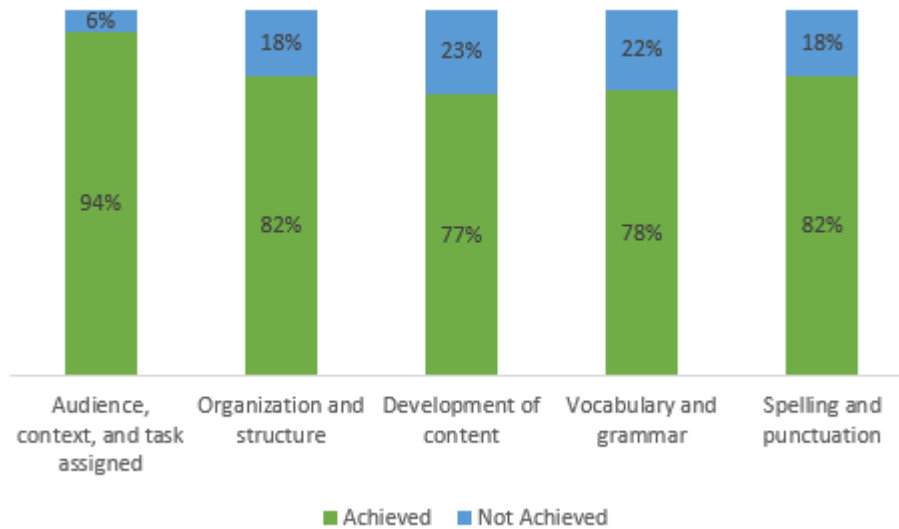
Figure 68. Institutional Learning Outcome of Written Communication (Level 2) - Overall Results per Dimension.

Figure 69. Institutional Learning Outcome of Written Communication (Level 3) - Overall Results per Dimension.

The results evidenced significant improvement compared to the first assessment cycle of the learning outcome. Levels 1 and 2 reached the expected result (75%) in each dimension. Although they did not reach 100%, the results show significant improvement. Several opportunities for improvement were identified at level 3, which will be included in each program's action plan for the institutional learning outcome.

Based on the results obtained during the first and second assessment cycles for the institutional learning outcome of Written Communication, the following improvement actions were identified:

- The rubrics for the "Content Development" and "Spelling and Punctuation" dimensions need to be reviewed and redesigned in order to align the assessment with the expected level of results for this institutional learning outcome. As a result, "Online Assignment" activities, in which faculty members reviewed and provided feedback on student assignments, were included in the courses articulated with the institutional learning outcome in 2015 and 2016. The implementation of the afore mentioned improvement action resulted in an increase from 58% to 77% for the "Content Development" dimension and from 59% to 82% for the "Spelling and Punctuation" dimension at level 2 during the second assessment cycle. No data is available on the progress made with regard to the institutional learning outcome at level 3, as only level 2 was assessed in the first assessment cycle.

- Workshops will be held to design evaluation means and use rubrics for said institutional learning outcome.

- In addition, UPC will provide the teams in charge of evaluating each program with a space to reflect on the results obtained in order to formulate action plans for each program.
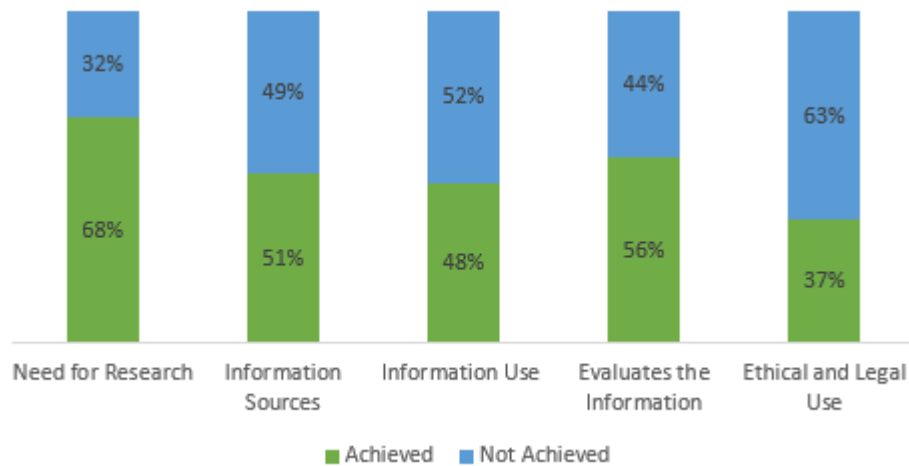
Assessment Results: Information Literacy

The second assessment cycle of the institutional learning outcome of Information Literacy at all three levels was carried out in 2018-1 based on a representative sample of evidence developed by students in different courses selected by each program.

Based on this information, a stratified probability sampling method was used to guarantee the representativeness of the results. The sample consisted of 704 students at level 1, 757 at level 2, and 585 at level 3. With regard to the number of programs, 30 programs participated in the assessment of the institutional learning outcome of Information Literacy at level 1, 26 at level 2, and 27 at level 3.

Finally, an evaluation committee with expertise in the institutional learning outcome participated in the evaluation of the evidence collected during this process.
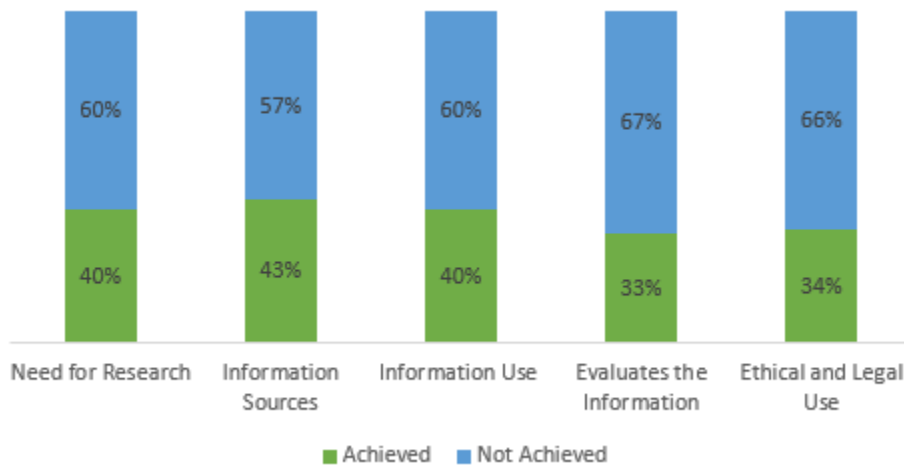
Figures 70, 71 and 72 show the results of the institutional learning outcome at levels 1, 2 and 3, respectively.

Figure 70. Institutional Learning Outcome of Information Literacy (Level 1) - Overall Results per Dimension.
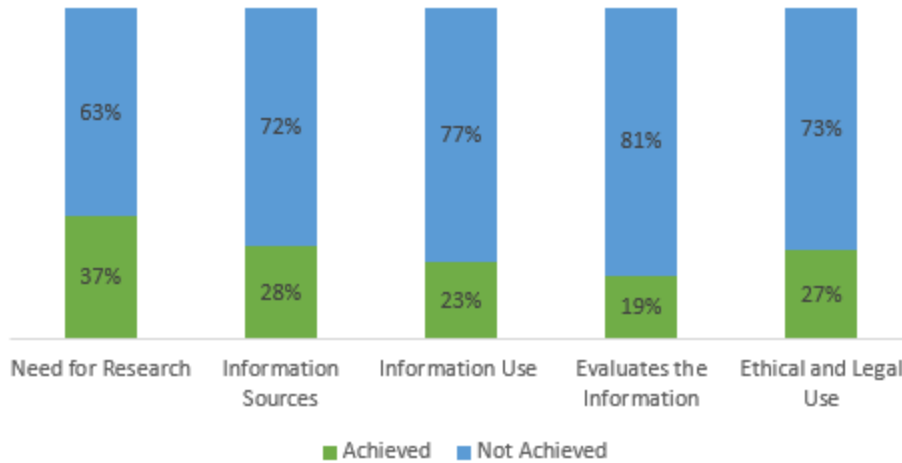
Figure 71. Institutional Learning Outcome of Information Literacy (Level 2) - Overall Results per Dimension.

Figure 72. Institutional Learning Outcome of Information Literacy (Level 3) - Overall Results per Dimension.

Based on the results obtained during the first and second assessment cycle of the institutional learning outcome of Information Literacy, the following improvement actions are being implemented:

- A Committee of Experts has been set up in order to review and adapt the rubric based on the improvement opportunities identified in previous assessment processes of the learning outcome.
- The Knowledge Management department has implemented specialized counseling services in order to provide support to students who experience difficulties in the development of the learning outcome and provide virtual faculty training on the mastery of the learning outcome and

how to develop the latter in their respective courses.

- The Humanities department has made the necessary adjustments, based on the results, to the courses it offers and that develop the learning outcome, in order to ensure that the students achieve the levels of the learning outcome that the courses develop.

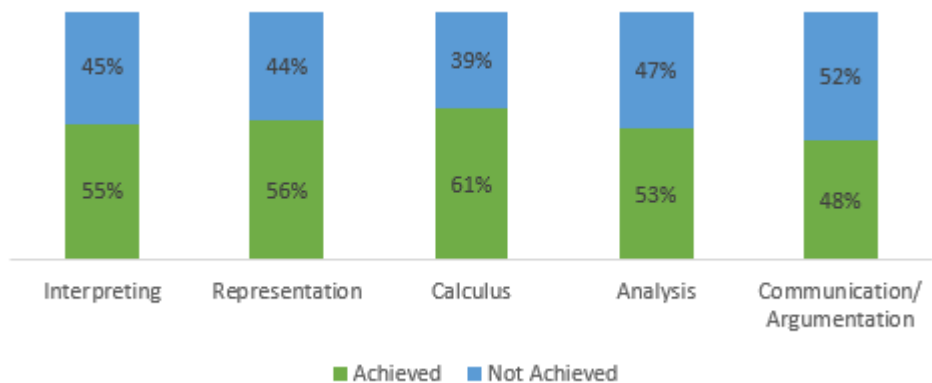**Assessment Results: Quantitative Reasoning**

The second assessment cycle of the institutional learning outcome of Quantitative Reasoning was carried out in 2019-1 in the courses selected by each program. Based on this information, a stratified probability sampling method was used to guarantee the representativeness of the results. The sample consisted of 1,086 students at level 1, 862 at level 2, and 704 at level 3 to assess said institutional learning outcome. With regard to the number of programs, 51 programs participated in the evaluation at level 1, 33 at level 2, and 31 at level 3.

When comparing the results of the second assessment cycle in 2019-1 with those of the first cycle in 2015-1, the results show that around 70% of the students achieved level 1 of the institutional learning outcome (compared to 37% during the first assessment cycle). Figure 73 shows the results of the second assessment cycle of the institutional learning outcome of Quantitative Reasoning at level 1.
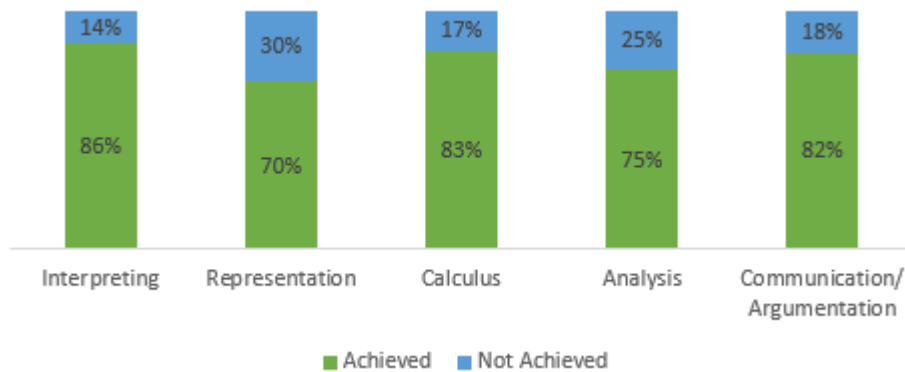
Figure 73. Institutional Learning Outcome of Quantitative Reasoning (Level 1) - Overall Results per Dimension.

The results of the second assessment cycle also show that around 45% of the students achieved level 2 of the institutional learning outcome (compared to 44% during the first assessment cycle).

Figure 74. Institutional Learning Outcome of Quantitative Reasoning (Level 2) - Overall Results per Dimension.
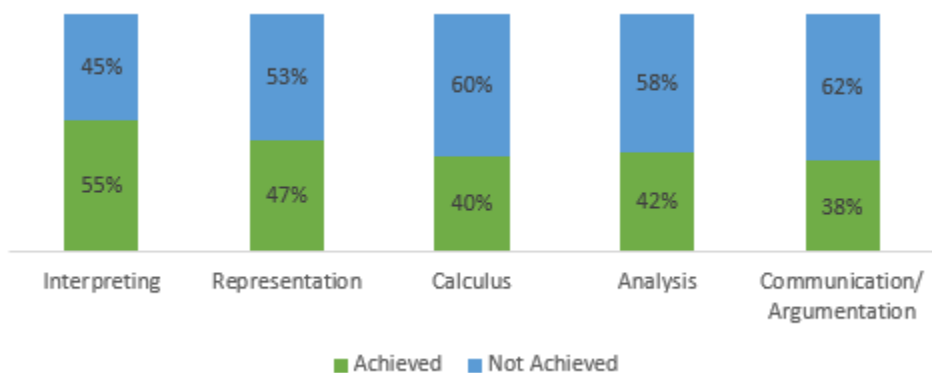
Figure 75. Institutional Learning Outcome of Quantitative Reasoning (Level 3) - Overall Results per Dimension.

Regarding the institutional learning outcome at level 3, around 55% of the students reached the expected level of the "interpretation" dimension, 47% of the "representation" dimension, 40%, of the "calculation" dimension, 42% of the "analysis" dimension, and 38% of the "communication/argumentation" dimension.

Improvements have been made in the second evaluation cycle of the learning outcome, upon implementing the respective improvement actions, as detailed below:

- In 2015-1, a committee of faculty members from the Science department was appointed to review and redefine the evaluation rubric for the learning outcome, review the evaluation instruments for each course articulated with the learning outcome, and identify the evidence to be collected for the evaluation.

- In 2019, a Committee of Experts was appointed in order to review the assessments used to evaluate the learning outcome, and to verify that these were aligned with the new rubric and allowed evaluating its dimensions in an objective and comprehensive manner.

With respect to the courses selected by the programs to evaluate level 3 of the learning outcome, the results showed that the evaluation means selected did not allow evaluating all the dimensions of the rubric. In terms of opportunities for improvement, the Evaluation Committees will receive additional training to design evaluation means in accordance with the basic criteria of the learning outcome.

Said workshops will allow faculty members to better understand the learning outcome criteria and conduct a more thorough review of the course activities. The workshops will be available to all UPC faculty members as of 2021.

Finally, upon completion of the assessment process and based on the results, a review of the rubric was carried out by a team of experts made up of undergraduate and graduate faculty members and directors. Throughout the process, adjustments were made to the dimensions so that the courses articulated to the learning outcome can be developed and evaluated in an effective manner. In addition, the new rubric was disseminated among a team of faculty members who teach the courses articulated to the learning outcome and their opinions were gathered prior to its official publication in SICA.

The Committee of Experts participated in the design of an institutional action plan in order to improve the results obtained in all three levels of the assessment. See below the actions to be implemented in 2022:

- Implementation of a workshop program aimed exclusively at faculty members who are in charge of courses articulated to the institutional learning outcome of Quantitative Reasoning.

- Launching of a communication plan directed to all programs, including relevant information related to the learning outcome according to each program and its context.

Assessment Results: Oral Communication

The second assessment cycle of the institutional learning outcome of Oral Communication at all three levels was carried out in 2019-2. Each program selected a course in order to evaluate each level, as per its curricular articulation. Based on this information, a stratified probability sampling method was used to guarantee the representativeness of the results. The sample consisted of 947 students at level 1, 584 at level 2, and 593 at level 3.

With respect to the action plan defined based on the results of the first assessment cycle of the learning outcome, the following improvement actions have been implemented:

- **Review of the rubric:** A Committee of Experts was appointed, including faculty members from the Humanities department and the School of Communications. The committee analyzed the rubric's definition and structure used in the first assessment cycle in 2015-2. As a result, the rubric and dimensions of the institutional learning outcome have been redesigned in order to include "active listening" as an evaluation criterion, or where descriptors are used to evaluate the results in a straightforward and objective manner.

- **Dissemination of training workshops for coordinators:** The coordinators of each program who teach the courses articulated to the learning outcome were invited to participate in face-to-face workshops aimed at disseminating and explaining the updated rubric. In addition, coordinators were provided with strategies to design evaluation means for their courses, taking into account the dimensions of the rubric. Of a total of 106 coordinators of courses articulated to the learning outcome, 72 participated in the workshops.

- **Evaluation of face-to-face evidence:** The assessment of the learning outcome was developed face-to-face in order to evaluate the learning outcome in a reliable manner. An evaluation committee was set up to carry out the face-to-face evaluations. This improvement action allowed successfully overcoming any issue during the evaluation related to audio problems and/or out-of-sync recordings, as videos recorded by the students were used previously.

Figures 76, 77 y 78 show the overall results of the institutional learning outcome of Oral Communication per dimension at level 1, 2 and 3, respectively.
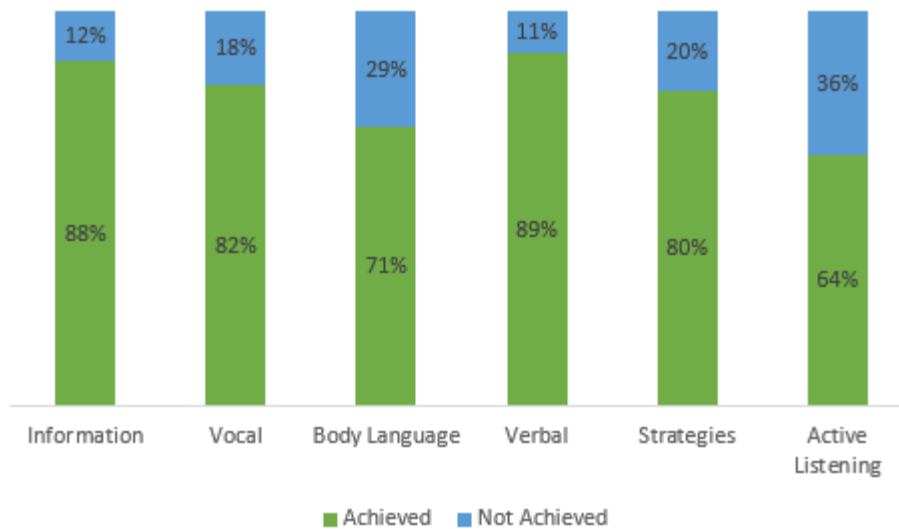
Figure 76. Institutional Learning Outcome of Oral Communication (Level 1) - Overall Results per Dimension.

Figure 77. Institutional Learning Outcome of Oral Communication (Level 2) - Overall Results per Dimension.
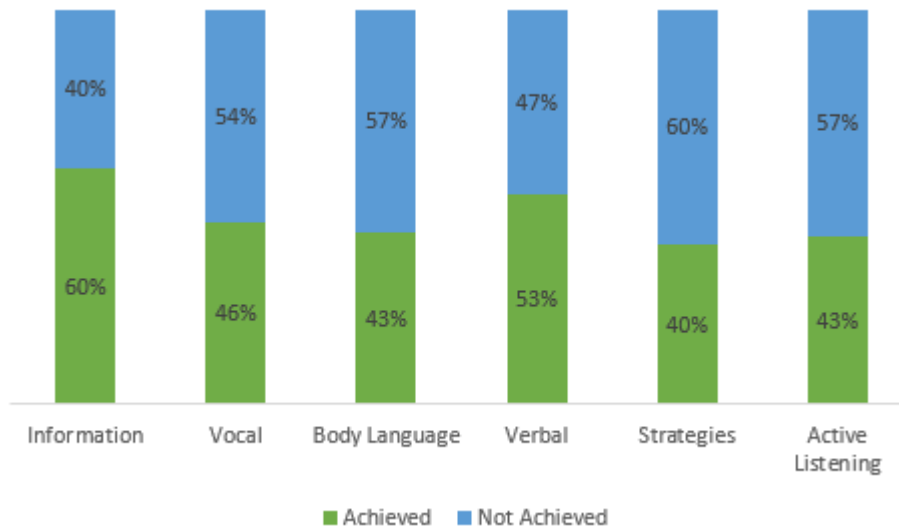
Figure 78. Institutional Learning Outcome of Oral Communication (Level 3) - Overall Results per Dimension.

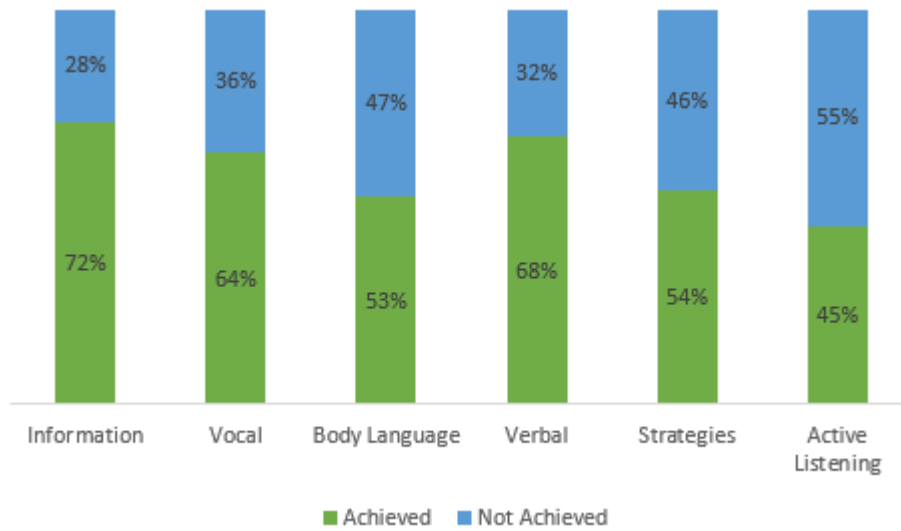Based on the results obtained during the second assessment cycle of the institutional learning outcome of Oral Communication, the following improvement actions were defined to be implemented in 2023:

- To develop training aimed at providing faculty members with the resources to design evaluation means and activities in order to evaluate all dimensions of the learning outcome.
- To evaluate the design of future assessment instruments, prior to their implementation, so as to ensure that they successfully assess all dimensions of the learning outcome.
- To review the curricular designs and syllabi: The programs should review and guarantee the development of the learning outcome in terms of curricular design and design of course syllabi.

III.   Academic Excellency Group Results

The Academic Excellence Group (AEG) was created in 2012 to recognize UPC's best students, offering them a series of learning opportunities oriented to foster their leadership skills and professional competencies with the purpose of becoming UPC referents in society.

Since 2012, and under the leadership of the Vice Rectorate of Academic Affairs and Research, the AEG has grown both in terms of position and value within the institution. Ten years after its inception, all students are aware of the fact that UPC recognizes and rewards talent.

The ultimate goal of this project is to promote a culture of academic excellence within UPC, motivating students to reach their full potential and effort continuously towards becoming outstanding professionals both at the academic and personal levels.

AEG requires UPC to constantly innovate so as to offer new and better benefits for its students. As a result, in 2014, UPC created the Leadership Program in order to complement the students' academic training by developing leadership skills.

The AEG program is constantly evolving, guided by UPC's mission educate upstanding and innovative leaders with a global vision who will transform Peru. Research and cultural activities are actively develop through the program, this strengthens the skills of AEG students and prepares them to have transcendental impact in the community.

The AEG inclusion criteria are as follows: (a) being enrolled in a minimum of 15 academic credits during the regular second term of the academic year; (b) having earned at least 40 academic credits, both cumulative and passed (passed courses refer to summer enrollment and/or two regular terms during the year); and (c) having a cumulative weighted average that is two standard deviations above the overall average of their academic program.

AEG students participate in a leadership program specially designed for them. This program develops and strengthens soft skills, self-awareness and initiatives geared towards innovation and social responsibility. The program covers 140 hours, lasts 2 years and includes 4 modules: (a) fundamentals and development of personal leadership skills; (b) fundamentals and development of social leadership skills; (c) advanced knowledge on leadership; and (d) transcendental leadership. In 2021, more than 600 students participated simultaneously in the Leadership Program and its various activities on UPC's campus and sites. The School of the *Instituto Tecnológico y de Educación Superior de Monterrey (Mexico)* participated in the program as well.

By the end of 2021, UPC reached 2,020 AEG students. Of all the students who participated in the program, around 80% took part in at least one conference or event specially designed for them.

Below is the list of activities and lectures developed for AEG students. Due to the COVID-19 pandemic, these programs were delivered online.

Leadership Program:

The Leadership Program has been designed especially for AEG students and seeks to develop and strengthen soft skills, self-awareness, innovation, and social responsibility. It lasts two years and includes activities offered simultaneously at all UPC sites and campus. The Leadership Program includes three training modules on personal leadership skills, emotional intelligence, and transcendental leadership, as well as a fourth international module on innovation and entrepreneurship (organized by the *Instituto Tecnológico y Educación Superior de Monterrey* in Mexico). **In 2021, 864 students participated in the Leadership Program.**
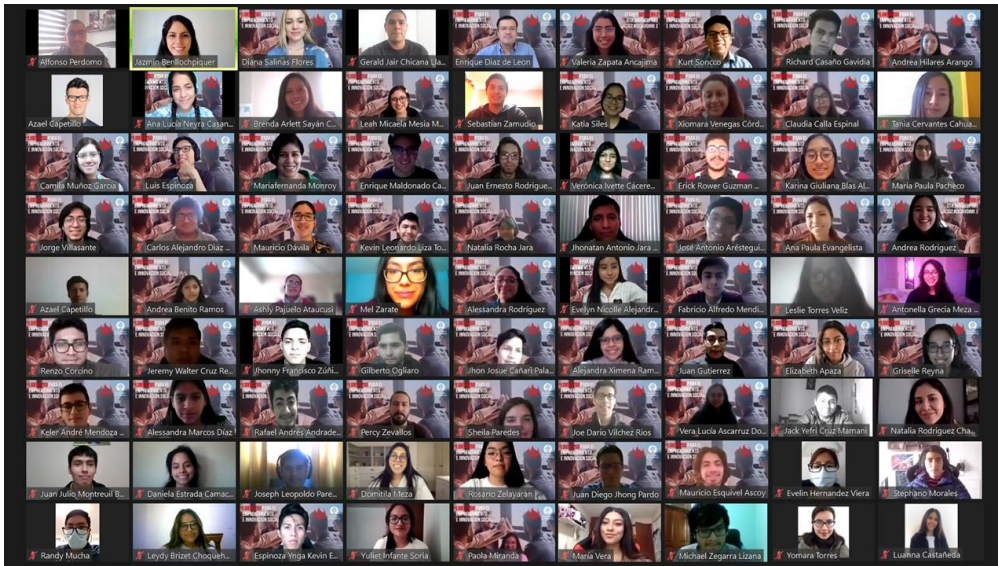
Figure 79. AEG students who participated in the last module of the Leadership Program in 2021.

Entrepreneurship Bootcamp:

Students who attend the Leadership Program's fourth module participate in a five-day bootcamp in which they develop social entrepreneurship projects under the mentorship of faculty members with experience in innovation and entrepreneurship from the *Instituto Tecnológico y Educación Superior de Monterrey (*Mexico*)*. In its latest edition, students that developed their entrepreneurship projects during 2021 (between August – December), were selected to participate in the Entrepreneurship Bootcamp. **In 2021, 88 students attended the Leadership Bootcamp.**

Figure 80. AEG students that developed entrepreneurial projects in 2021 and participated in the Entrepreneurial Leadership Bootcamp, with faculty members of the *Instituto Tecnológico y de Educación Superior de Monterrey* (Mexico).

"*Trasciende Perú*" [Transcend Peru] Congress

This congress was established at the initiative of AEG students. The congress includes the participation of external speakers who talk about topics relevant to Peru. Topics in previous editions included: education, environmental sustainability, and social entrepreneurship. Participants work in groups to develop and propose solutions to address innovative solutions to these issues. In its latest edition, the 2021 congress included the participation of international guest speakers and changed its name to "*Congreso Internacional de Ética y Ciudadanía: Trasciende Perú*" [International Congress on Ethics and Citizenship: Transcend Peru]. **In 2021, 180 students participated in the Congress.**

Figure 81. AEG students who took part in the 2021 "*Congreso Internacional de Ética y Ciudadanía: Trasciende Perú*" [International Congress on Ethics and Citizenship: Transcend Peru].

AEG Conference and Workshops:

These workshops have been specially designed for AEG students and seek to develop professional skills. Some workshops focus on personal development, public speaking, negotiation, teamwork, and high-impact presentations, among other topics. **In 2021, 500 students participated in the workshops and conferences.**
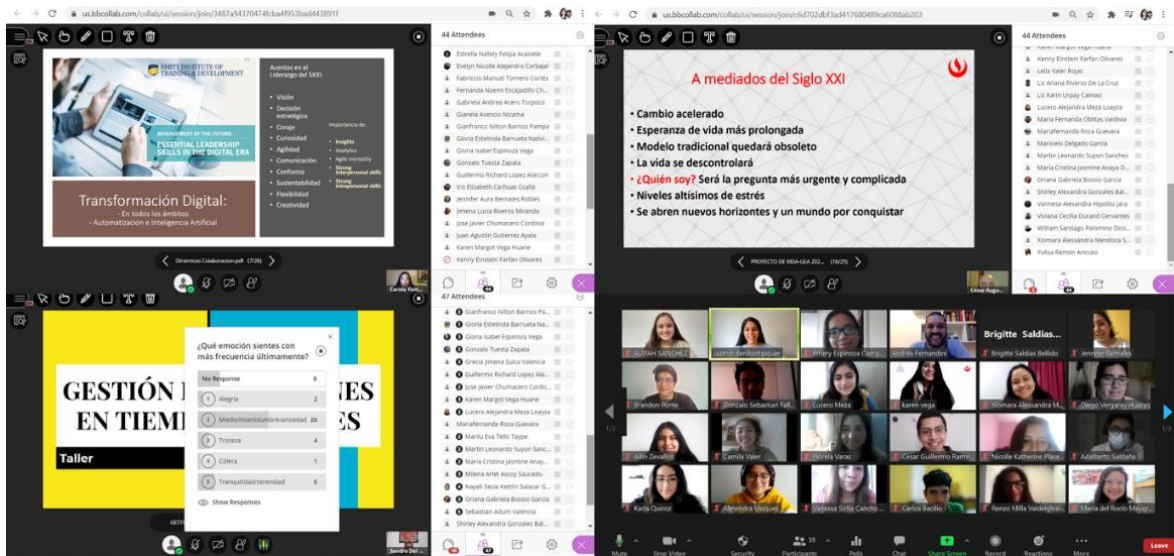

Figure 82. AEG students who took part in the 2021 workshops.

IV. University Life Results

The University Life Office disseminates, manages, and promotes various activities related to arts, culture, sports, and social responsibility that enrich the educational experience of UPC students as they explore, express, and broaden their perspective of the world through active participation in society. Through these activities, the University Life Office seeks to develop four co-curricular learning outcomes of UPC's Educational Model: Leadership, Self-Development, Global Vision, and Social Initiative.

Students must earn four extracurricular credits, as a mandatory requisite to obtain their Bachelor's degree.

Students have multiple opportunities to earn said credits, including: UPC clubs, class delegates, qualified athletes, UPC troops, UPC groups, cultural passport, student representation, UPC sports teams, extracurricular workshops, and volunteering in organizations or campaigns. Additional information of the activities offered is available at (link).

Since 2020, due to COVID-19 pandemic, the University Life office designed and adapted co-curricular experiences to be offered online, fulfilling the same learning results expected at each experience.

In 2021, with the exception of UPC Groups, University Week and CADE Universitario, all University Life programs were delivered 100% online. Both resilience and the collaboration of facilitators, directors, trainers, and students have been key to successfully adapt different disciplines and spaces to online environments.

Volunteer programs in organizations and UPC's cultural passport activities have proven to be powerful alternatives for students to earn extracurricular credits in the online format.

With regard to artistic troupes and sports teams, students continued training and participation was ensured using videoconferencing. UPC Troupes continued to rehearse online and performed at internal and external online events. Sports teams continued training and participating in inter-university competitions. Students received training materials and borrowed musical instruments to practice at home and keep the community united and engaged.

Cultural Fridays, which take place every Friday from 1:00 pm to 3:00 pm during regular terms, were developed through platforms such as Blackboard Collaborate, Zoom, Facebook, Instagram, and YouTube for the second consecutive year. Admission to Cultural Fridays activities was free of charge and students were offered the following options: cultural, social, academic or sports activities through various platforms.

The main results of the University Life Office for the 2015-2021 period are shown in figures 83 and 84.
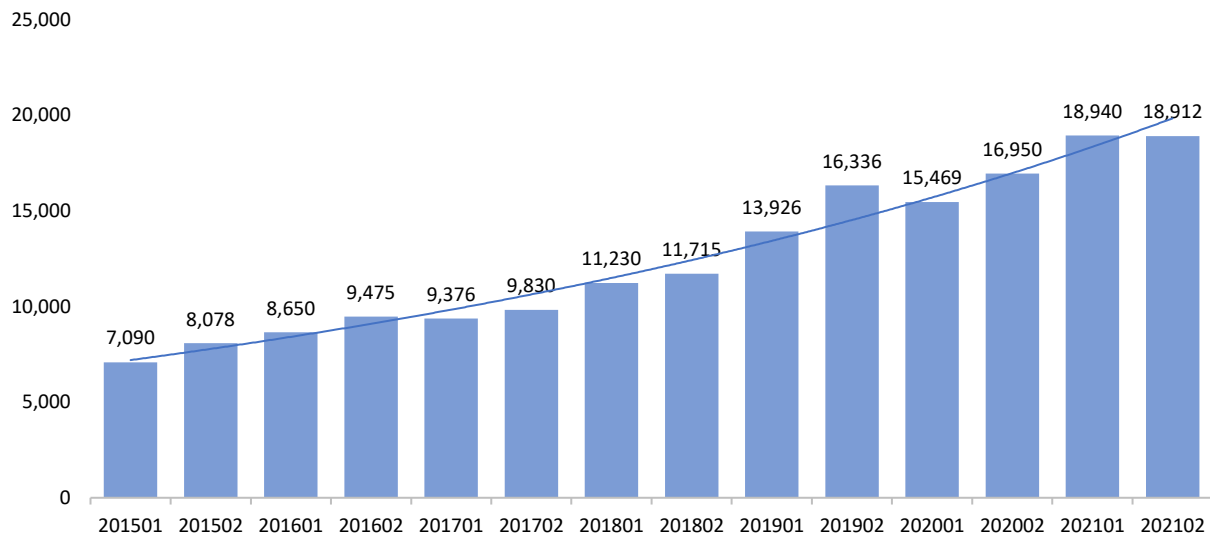
Figure 83. Co-curricular credits awarded per academic term (2015-2021).

In 2021, UPC offered cocurricular activities adapted to digital platforms, with more than 70,000 students (contacts) participating in said activities during the 2021-1 and 2021-2 academic terms.
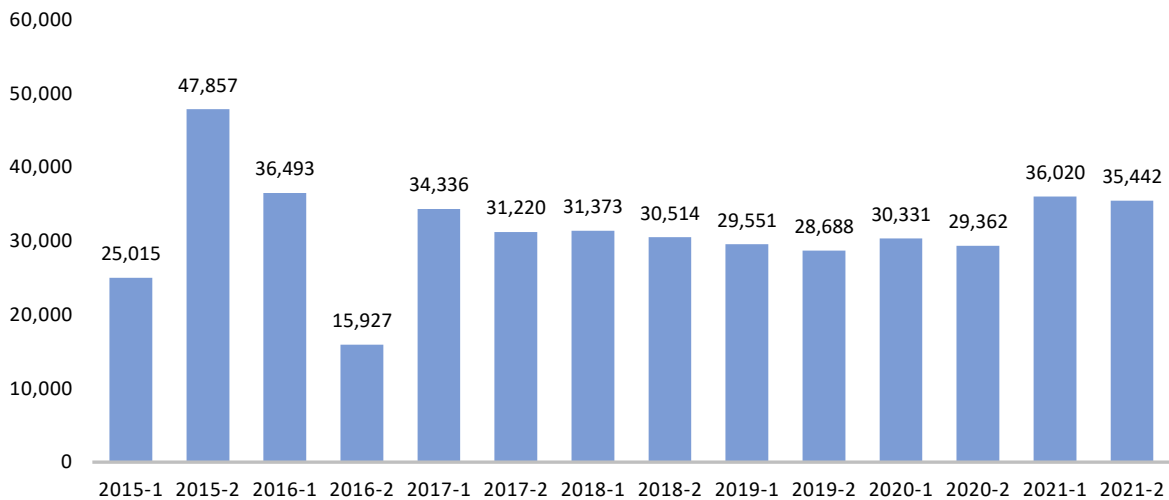
Figure 84. Number of contacts in co-curricular activities per academic term.

Note: The "number of contacts" indicator represents the total number of students who participated in co-curricular activities but did not earn a credit during the term. This indicator takes into account the attendance of students in each event organized by the University Life Office.

With regard to the students' achievements in co-curricular activities, see below the main results per activity in 2021:

UPC Troupes

UPC Troupes were created in order to provide students with a space to develop performing arts, such as dance and music, as well as entertainment, theater and improv. The troupes include students from different programs who perform on and off campus.

In 2021, UPC Troupes continued collaborating on the university's online platforms and were allowed to perform their routines face-to-face at times, which is necessary to strengthen their artistic production processes. Seven UPC Troupes shared their talent in different online platforms, obtaining distinguished recognitions:

- The **Master-of-Ceremonies Troupe** premiered "*Anímate*" a space for entertainment through conversations and the exchange of opinions in different fields.

- The **Polyphonic Troupe** continued to rehearse online, preparing a new repertoire soon to be shared with the University's community.

- The **Peruvian Dances Troupe** presented its audiovisual project titles "*Así te siento y te celebro Perú*" [This is how I Feel and Celebrate Peru] and closed its artistic season by participating in the First National Meeting of University Folkloric Troupes | ENEFU 2021 organized by the Folkloric Cultural Center of the Universidad Nacional de Ingeniería | FOLKUNI.

- The **Improv Troupe** hosted an online championship called "*Impro Callejera*" [Street Improv] with talented improv artists from different schools in Lima. In September, they launched their online show "Los Juegos del Sombrero" [The Hat Games] to present new talents who joined the cast this year.

- The **Peruvian Music Troupe** celebrated the second anniversary of the launching of the album "*Perú, un sonido*" [Peru, One Sound] with a magnificent online concert at the Municipal Theater of Lima. The Troupe also participated in the recording of the song "*Bicentenario con esperanza*" [Bicentennial with Hope] by the band Afrocandela.

- The **Street Dance Troupe** presented the online shows "*Nuestro Espacio*" [Our Space] and "*Celebremos*" [Let's Celebrate]. Both concepts were created and choreographed by the cast members and their director.

- The **Theater Troupe** premiered Act II and III of Hamlet in an audiovisual format. In addition, the Troupe hosted a series of talks on Hamlet during UPC Cultural with prominent national and

international researchers.

- Finally, the "*Tiempo Nuevo*" [New Times] project brought together members of the Peruvian Music Troupe and the Peruvian Dances Troupe in a video clip celebrating Peru's Bicentennial of Independence, sharing a message of resilience and motivation through music and dance.

Figure 85. Scene of "*Tiempo Nuevo*" [New Times] performed by members of UPC's Troupe.

Figure 86. The Peruvian Dances Troupe recording the song "*Bicentenario con esperanza*" [Bicentennial with Hope]

UPC Cultural

In January 2021, UPC launched its online cultural center (link). This platform is aimed at society at large and seeks to offer different cultural contents. Its main objectives are:

- To promote, disseminate and discuss artistic and cultural initiatives and improve access to all with flexible formats so as to broaden their scope and impact.

- To position UPC as a university that promotes arts, culture and heritage with quality content that contributes to the transformation of Peru.

Figure 87. Collage that shows various topics and artistic and cultural productions included in UPC Cultural.

By the end of 2021, 12 multimedia and 3D exhibitions, 4 podcast series and 4 program series have been produced and disseminated. In addition, the University has promoted more than 50 cultural events and launched 7 videos. Most contents reflect the talent of UPC managers, artists, faculty members and students. In addition, UPC has included cultural and artistic content from artists and institutions that work closely with UPC.

Figure 88. Exhibition "Imágenes de poder o el poder de las imágenes" [Images of Power or the Power of Images] at UPC Cultural.

UPC Sports

In 2021, among other activities promoted by the University, and in addition to organizing and hosting competitions, UPC has achieved the following results:

- National Online Karate Kata University Championship 2021-1 - UPC Champion
- National Online Karate Kata University Championship 2021-2 - UPC Champion
- National Online Weightlifting University Championship 2021-1 - UPC Champion
- National Online Weightlifting University Championship 2021-2 - UPC Champion
- National Online Wushu University Championship 2021-1 - UPC Champion
- National Online Wushu University Championship 2021-2 - UPC Runner-Up
- National Online Chess University Championship 2021-1 - UPC Runner-Up
- National Online Chess University Championship 2021-2 - UPC Champion
- National Online Taekwondo University Championship 2021-1 - UPC Champion
- National Online Taekwondo University Championship 2021-2 - UPC Champion
- Organization of the Second International Online Taekwondo Cup with the participation of teams from Bolivia, Costa Rica, Ecuador, Mexico, Colombia and Peru. UPC's team won first place.
- Organization of the 2021 National Online Karate Kata Cup with the participation of 8 universities. UPC's team won first place.
- Organization of the Third Online Inter-University Chess Cup with the participation of 7 universities. UPC's team won first place.
- Organization of the 2021 Super University Chess Cup with the participation of 4 universities. UPC's team won first place.
- UPC was recognized with the excellence award from the University Sports Federation of Peru in the Sports Achievement and Major Participation categories.

Figure 89. Recognition awarded to UPC by the University Sports Federation to the UPC.

In 2021, UPC students excelled in national inter-university eSports festivals (FIFA 20, DOTA2, League of Legends, Free Fire and Fortnite):

- Free Fire 2021-1 - UPC Champion
- Free Fire 2021-2 - UPC Champion
- DOTA2 2021-1 - UPC Champion

Figure 90. Results of the Free Fire competition organized by FEDUP.

In 2021, UPC athletes and classified athletes competed in national and international championships and achieved the following results:

- **Joaquín Vargas**, student of the Industrial Engineering program, qualified to the Olympic Games - Tokyo 2020 (held in 2021) in swimming.
- **Francesca Gardella**, student of the Administration and Finance program, won 11th place in the World Youth Rowing Championship and won silver at the 2021 Pan American Youth

Games.

- **Sandro Gardella**, student of the Administration and Finance program, won the title of South American Youth Champion in single scull rowing and won bronze at the 2021 Pan American Youth Games.
- **Inés Castillo**, student of the Fashion Design and Management program, won bronze at the 2021 Pan American Youth Games in badminton.
- **Edward Gonzales**, student of the Administration and International Business program, won silver at the 2021 Pan American Youth Games in gymnastics.
- **María José Rojas**, student of the Administration and Marketing program, won silver at the 2021 Pan American Youth Games in volleyball.
- **Frank de la Sotta**, student of the Medicine program, won bronze at the 2021 Pan American Youth Games in bowling.
- **Thais Fernandez**, student of the Communication and Publicity program, was awarded the title of South American champion in Aerobic Gymnastics.
- **Alvaro Arones and Sandy Quiroz**, students of the Civil Engineering and Psychology programs, won silver at the South American Water Sports Championship in artistic swimming mixed duet.
- **Frank Marmanillo**, student of the Psychology program, won the U-17 Virtual Pan American Cup in weightlifting in the 73 kg category.
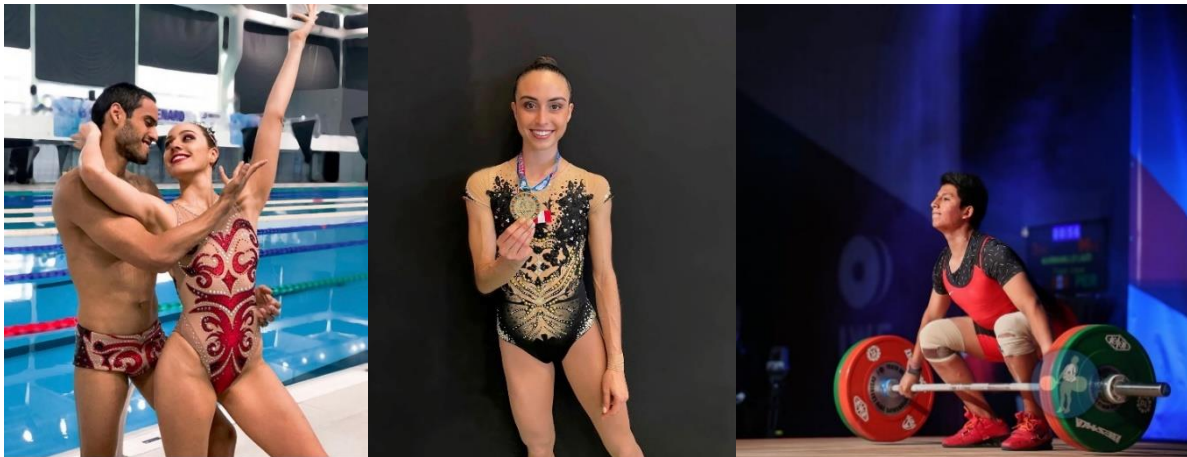
Figure 91. Students and Qualified Athletes: Alvaro Arones and Sandy Quiroz in Artistic Swimming, Thais Fernandez in Aerobic Gymnastics and Frank Marmanillo in Weightlifting.

In addition, as a result of its great commitment to sports, in particular, the promotion of gender equality in sports and physical activity, UPC organized a series of activities in collaboration with LF7 Women's Leagues and Fundación Deporte en Igualdad, such as talks, workshops and the first annual sports award for women in Peru in 2021. This award ceremony, titled "Igualdad, Mujer y Deporte" [Equality, Women and Sports], was broadcasted live on television and social networks, and was attended by the most outstanding sportswomen, coaches, and sports agents in Peru.

Figure 92. Press conference and ceremony of the Equality, Women and Sports Award.

In addition, the second and third seasons of the podcast titled "En nombre del Deporte" [In the Name of Sports] were developed in collaboration with the Peruvian Olympic Committee and the Peruvian National Paralympic Association. The podcast was nominated for the 2021 Luces Awards, organized by the Grupo El Comercio, as the best digital sports program.

Figure 93. Promotion of episodes of the second and third seasons of the podcast "*En nombre del Deporte*" [In the Name of Sports].

In 2021, UPC organized the first edition of WeRunUPC, a virtual race that became the first event involving UPC's community (students, alumni, faculty, and other collaborators) in order to promote physical activity and healthy habits. More than 300 people attended the event and more than S/. 15,000 were raised to support the MAB project called "*De Tambo a Tambo*" [One Village at a time] so as to close social and educational gaps in Peru.

Figure 94. Milagros Morgan, UPC's Vice-Rector for Academic Affairs and Research, awarding the prize to Macarena Arribas, UPC graduate and Director of MAB.

Figure 95. WeRunUPC race poster.

UPC Volunteer Program

In 2021, based on UPC's experience in 2020 and due to the COVID-19 pandemic, 2,158 students participated in online volunteer activities. The students worked with organizations that adapted volunteer work and provided different opportunities such as: *Proyecto Especial Bicentenario* [Bicentennial Special Project], *Kaprichos Perrunos* [Dog Whims], *Sembrando Cultura* [Sowing Culture], *Siloé, Juguete Pendiente* [Missing a Toy], and *Legado* [Heritage], among others. Both organizations and volunteers were able to work in an efficient manner and with a strong commitment in terms of social work, which allowed them to connect and reach more places in Peru through online means.

On the other hand, UPC was able to validate the volunteer work of its students who are part of Peru's General Volunteer Fire Brigade - CGBVP and the Bicentennial Volunteers Program of the Bicentennial Special Project 2021 - PEB of Peru's Ministry of Culture.

Figure 96. Images of students doing online volunteer work at Siloé, a Peruvian organization.

Figure 97. Invitation to register for students who are volunteers in the Bicentennial Volunteers Program.

V.   Internationality Results

After more than a year of the COVID-19 pandemic and travel restrictions, in 2021, international borders re-opened, allowing UPC students to have international onsite experiences once again. UPC's International Office (IO) continued to offer programs such as exchanges, study abroad, credit transfer programs, certificates, among others.

Throughout the year, innovation was a key factor as the IO launched new programs, such as minors in Protocol & Event Organization, in Marketing and in International Commerce for outbound students.

The IO expanded its services for international inbound students, offering them four types of international certificates: Information Technology (IT), International Marketing, International Business, and Communications. These certificates increased academic options for inbound students and were highly attractive to them; for the first time, UPC had a record high of 537 international students.

Additionally, UPC collaborated on two Erasmus+ agreements with University of Hertfordshire (United Kingdom) and Pan-European University (Slovakia), developing new academic products and mobility opportunities for our faculty, staff, and students, both, inbound and outbound.

Undergraduate Programs

In 2021, a total of 878 UPC's students participated in international academic experiences, being those: academic exchange and study abroad experiences (152 students); short-term academic programs (457 students); credit transfer, certificate, and alumni programs (72 students); and other experiences such as international degrees (197 students).

From this total, 718 students completed their international programs online and 160 onsite. For both modalities, the most popular destinations among UPC students were United States (30.6%), Chile (13%), Spain (12.3%), Colombia (11.5%), Poland (8.8%) and France (5.8%).

Virtual exchange semesters and short-term programs continued, with a participation of 537 international students. International students were from Colombia (60.3%), Mexico (25.7%), Poland (3.5%), France (3.3%) and Costa Rica (2.6%).
Table 20 shows the main internationality results for undergraduate programs in 2021.

Table 20. Internationality Indicators for Undergraduate Programs (2021)

Indicators	Result
Outbound students	878
Inbound students	537
Scholarships received by outbound students	14
Students participating in international conferences	40,548
International collaboration agreements	254

Figure 98. On October 14, 2021, Mr. Eric Anderson Machado, Ambassador of Peru to Austria met with Josilu Carbonel, UPC International Office Director; Valeria Miranda and Luis Carlo Guillén, UPC Administration and Marketing majors, and winners of the Erasmus+ scholarship, and Dr. Slavomir Rudenko, International Relations Director of Pan-European University. Claudia Guevara de la Jara, Minister-Counselor of the Diplomatic Service of Peru, was also present at the meeting.

Figure 99. UPC students at the academic mission at Zaragoza and Madrid, organized by UPC's International Office and CESTE International Business School (December 2021).

Graduate School Programs

The graduate school (EPG), considering the conditions imposed by foreign institutions during the pandemic, decided to remain virtual during the year 2021. As in 2020, all International Seminars were maintained in a digital format.

Table 21 and table 22 present the main internationality results for UPC Graduate Programs in 2021.

Table 21. Main internationality results for graduate programs (2021)

Indicators	2020	2021
International missions of GS - UPC students abroad (in-person)	16	0
International missions of GS - UPC students abroad (online)	108	453
Foreign faculty mobility inbound (in-person)	8	0
Foreign faculty mobility inbound (online)	65	80
Participation as International Sponsors – Summit	2	0

Table 22. Internationality Indicators for Graduate Programs (2021)

Indicators	2016	2017	2018	2019	2020	2021
Outbound Students International Missions	297	366	329	366	124 [1]	453 [1]
Inbound Students International Missions	15	8	26	9	0	0
Faculty Mobility Outbound	15	17	17	19	0	0
Faculty Mobility Inbound	32	49	47	53	61	80
Number of students who participated in international conferences based in Peru	-	-	-	-	1,037	-
Number of students who participated in classes with international faculty					2,672	2,442
Total Mobility	359	440	419	447	3,906	2,975

(1) Outbound Students International Missions (onsite and online).

In 2021, UPC had the opportunity to offer the academic mission for the International MBA, to students and alumni of the different MBA programs. This program is optional, so that students can improve their management skills and gain a global vision. By the end of 2021, 20 students participated.

Many of the graduate programs include as part of their international components, international faculty. As in prior pandemic years, 2021, continued to engage professors in a virtual manner. In 2021, 80 international professors taught in 46 programs (specialized programs and masters).

Graduate programs students participated in an International Competition, held by Nazareth College. The School of Business and Leadership at Nazareth College, annually holds the Global Case Competition, and

invites students from around the world to participate. Thus, a group of UPC's MBA students competed against students from 14 other universities, being the only Peruvian university in the competition. See below the list of the participating universities in the Global Case Competition (2021).

Table 23. Participating universities in the Global Case Competition (2021)

1	Budapest University of Technology and Economics
2	Craiova University, Faculty of Law
3	Fuyang Normal University
4	Guangzhou Xinhua University
5	Kwansei Gakuin University, Institute of Business and Accounting
6	Laurea University of Applied Science
7	National University of Ostroh Academy
8	Nazareth College
9	NingboTech University
10	Phenikaa University
11	SolBridge International School of Business
12	Universidad Peruana de Ciencias Aplicadas (UPC)
13	University of Pannonia, Faculty of Business and Economics
14	University of Pecs, Faculty of Business and Economics
15	Xinhua College of Sun Yat-sen University

VI. Employability Results

Table 24 shows the main employability results for Traditional Undergraduate Programs in 2021. The employment rate exhibits an improvement, compared results in 2020, who were impacted due to COVID-19 health emergency context.

Table 24. Employability Results for Graduate Students of Traditional Undergraduate Programs

Indicator	Result 2017	Result 2018	Result 2019	Result 2020	Result 2021
Employment Rate[1]	90.50%	94.32%	94.26%	82.84%	91.50%
Skill Match Rate[2]	98.98%	99.17%	98.04%	98.00%	97.50%

Note: 1) Employment Rate Formula: (Full Time + Part Time + Self Employed Alumni) / [Survey Respondents – (Not seeking employment + currently enrolled in a higher education program)] = Emp. Rate %. **2) Skill Match Rate Formula:** (Alumni Employed Full Time + Part Time + Self Employed in field of study) / (Employed Survey Respondents) = Skills match %.

In addition, UPC analyzes the employment results attained by graduate students of all higher education institutions in Peru and their average salary. Data is obtained through the *Portal Ponte en Carrera*.

The *Ponte en Carrera* website (link) is a web platform developed by the Peruvian Ministry of Labor and Employment Promotion, the Peruvian Ministry of Education and IPAE (Peruvian Institute of Business Administration) to provide reliable and public information on current educational alternatives available and labor market demand for better decision making from students in view of future career opportunities.

Based on 2021 *Ponte en Carrera* results, there were 20 UPC programs among the best paid, five of UPC's programs track to employment in the second highest track of salaries, and six programs to the third highest. See Table 25 and table 26 below for detailed information.

Table 25. Number of UPC Programs at best paid jobs in Perú – Accordingto the *Ponte en Carrera* website (2018-2021)

Indicator	2018	2019	2020	2021
Number of UPC Programs at best paid jobs in Perú	**30**	**29**	**26**	**31**
1st place	19	14	14	20
2nd place	8	11	9	5
3rd place	3	4	3	6

Table 26. UPC Programs with Most Graduate Students in Higher-Paying Jobs in Peru, according to the *Ponte en Carrera* website (2021)

No.	Program	Average Monthly Salary (Expressed in PEN)
1	**Systems Engineering** (Working Adult Undergraduate)	**3,951**
2	**Software Engineering** (Traditional Undergraduate)	**3,951**
3	**Economics and Finance** (Traditional Undergraduate)	**3,323**
4	**Economics and International Business** (Traditional Undergraduate)	**3,323**
5	**Banking and Financial Administration** (Working Adult Undergraduate)	**3,031**
6	**Entrepreneurial Administration and Management** (Working Adult Undergraduate)	**3,031**
7	**Administration and Human Resources** (Traditional Undergraduate)	**3,031**
8	**Educational and Pedagogical Management** (Traditional Undergraduate)	**2,949**
9	**Administration and Marketing** (Traditional Undergraduate)	**2,701**
10	**Administration and International Business** (Traditional Undergraduate)	**2,607**
11	**Audiovisual Communication and Interactive Media** (Traditional Undergraduate)	**2,443**
12	**Communication and Corporate Image** (Traditional Undergraduate)	**2,443**
13	**Communication and Marketing** (Traditional Undergraduate)	**2,443**
14	**Communication and Journalism** (Traditional Undergraduate)	**2,443**
15	**Communication and Publicity** (Traditional Undergraduate)	**2,443**
16	**Gastronomy and Culinary Management** (Traditional Undergraduate)	**2,388**
17	**Hospitality and Business Administration** (Traditional Undergraduate)	**2,388**
18	**Tourism and Business Administration** (Traditional Undergraduate)	**2,388**
19	**Professional Interior Design** (Traditional Undergraduate)	**2,028**
20	**Fashion Design and Management** (Traditional Undergraduate)	**2,028**

VII. Alumni Results

Table 27 shows the alumni results for 2018, 2019, 2020, and 2021 respectively.

Table 27. UPC Alumni Results (2018-2021)

Indicator	Result
UPC Graduate Students 2021[4]	**Total Graduates: 52,186** Traditional Undergraduate graduates: 28,868 Working Adult Undergraduate graduates: 13,514 Graduate School graduates [5]: 9,804
UPC Graduate Students 2020[3]	**Total Graduates: 45,026** Traditional Undergraduate graduates: 24,274Working Adult undergraduate graduates: 11,888 Graduate School graduates [5]: 8,864
UPC Graduates 2019[2]	**Total Graduates: 40,660** Traditional Undergraduate graduates: 21,246Working Adult Undergraduate graduates: 10,850 Graduate School graduates [5]: 8,564
UPC Graduates 2018[1]	**Total Graduates: 36,312** Traditional Undergraduate graduates: 18,318Working Adult Undergraduate graduates: 9,703 Graduate School graduates [5]: 8,291

Note 1: Cumulative graduate results updated as of December 2018.
Note 2: Cumulative graduate results updated as of December 2019.
Note 3: Cumulative graduate results updated as of December 2020.
Note 4: Cumulative graduate results updated as of December 2021.
Note 5: The cumulative results for Graduate School graduates take into consideration the graduates ofgraduate programs with a duration of more than 9 months.
Note 6: The reported graduates are those who fulfill all graduation requirements.

7. Alumni Conferences and Events in 20212

In 2021, the Alumni Office organized the eighth UPC Alumni Reunion to build an engagement-driven culture, foster networking, enhance employability, and provide opportunities for continuing education.

See below a summary of this virtual event organized in 2021:

8th UPC Alumni Meeting – #*SIEMPRECONECTADOS*

In December 2021, the 8th UPC Alumni Meeting was held; for this event Undergraduate, Working Adult and Graduate School Alumni were invited. All the activities for the announcement of the meeting kept the concept of #SeguimosConectados.

More than 925 attendees participated in this event. Participants enjoyed a great evening, in which UPC's Vice Rector, Milagros Morgan, addressed the gathering. Then, we enjoyed a conference with Tuti Furlan,

who shared with us a great conference *"Botiquin Emocional"*. The closure was in charge of two great actors who shared with us their most recent show *"Terapia de Pareja"*. We have a great time with them.

Figure 100. Key Visual of the 8th UPC Alumni Meeting

The virtual meeting UPC Alumni 2021 is available at: (link).

VIII. Retention, Graduation and Enrollment Results

This section presents retention, graduation and enrollment results between 2017 and 2021.

Retention Results:

UPC has defined two key indicators to analyze retention results.

- Retention, Graduation and Attrition Results per Semester (See Table 28 and Table 29)
  This indicator analyzes retention, graduation, and attrition results per semester, based on enrollment breakdown. In this sense, retention results represents the number of students who were enrolled in the immediate previous semester and who still enrolled in each reported semester. Attrition represents those that were enrolled in the immediate previous semester and who are not enrolled in each reported semester and graduation, those that were enrolled in the immediate previous semester and who completed the curricular plan.

- Retention at first-year
  This indicator the percentage of New enrollment who continued their studies to the first year / New enrollment.

Table 28. Retention Results for Traditional Undergraduate Programs (2017-2021)

Metric	2017-01	2017-02	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Attrition	12.5%	12.4%	12.4%	11.8%	12.7%	14.6%	19.8%	10.60%	11.3%	10.1%
Graduation	2.4%	3.2%	3.2%	3.9%	2.9%	2.6%	2.1%	3.80%	2.0%	4.4%
Retention	85.1%	84.4%	84.4%	84.3%	84.4%	82.8%	78.1%	85.6%	86.7%	85.5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 29. Retention Results for Working Adult Undergraduate Programs (2017-2021)

Metric	2017-01	2017-02	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Attrition	20.0%	24.4%	23.7%	26.6%	27.0%	33.3%	29.9%	29.6%	24.7%	25.5%
Graduation	5.5%	8.2%	6.4%	8.7%	5.9%	2.2%	2.2%	3.3%	1.3%	7.8%
Retention	74.5%	67.4%	69.9%	64.7%	67.1%	64.5%	67.9%	67.1%	74.0%	66.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 30. Retention Results for Graduate School Master Degree Programs (2016-2021)

Metric	2016	2017	2018	2019	2020	2021
Retention	96.1%	97.2%	97.8%	94.0%	96.2%	96.9%

Note: 2019 was a year impacted by a decreasing GDP in Peru and in some cases, students had to quit their studies during the year.

Table 31. Retention Results at the 1° year - Undergraduate Programs (2016-2021)

Incoming cohort	Period	Traditional Undergraduate Programs	Working Adult Undergraduate Programs
201501	201601	75.35%	48.66%
201502	201602	69.03%	47.89%
201601	201701	74.64%	48.54%
201602	201702	68.33%	46.48%
201701	201801	72.72%	46.73%
201702	201802	65.25%	48.34%
201801	201901	71.93%	50.00%
201802	201902	65.58%	43.31%
201901	202001	69.53%	43.24%
201902	202002	64.10%	32.37%
202001	202101	67.42%	47.29%
202002	202102	80.67%	42.57%

Note: Retention rate at first year: (New enrollment who continued their studies to the first year / New enrollment) x 100.

Number of graduates at Undergraduate and Master Degree Graduates Programs:

Table 32. Graduation Results for Undergraduate Programs (2015-2021)

Year	Graduates
2015	2,657
2016	3,416
2017	4,241
2018	4,898
2019	4,933
2020	5,854
2021	7,320

Note. Considers the number of graduates that have completed the curricular plan at bachelor degree programs.

Enrollment Results:

Table 33. Graduation Results for Graduate School Programs (2015-2021)

Year	Graduates
2015	301
2016	322
2017	478
2018	566
2019	413
2020	617
2021	580

Note. Considers the number of graduates that have completed the curricular plan at master degree programs.

Table 34. Total Enrollment Results for Undergraduate Programs (2016-2021)

Term	Traditional Undergraduate	Working Adult Undergraduate	Total Undergraduate
2016-01	37,775	13,288	51,063
2016-02	36,696	13,660	50,356
2017-01	42,743	12,985	55,728
2017-02	41,065	12,948	54,013
2018-01	47,436	12,266	59,702
2018-02	44,584	12,020	56,604
2019-01	49,447	11,339	60,786
2019-02	47,169	10,802	57,971
2020-01	50,107	10,427	60,534
2020-02	44,431	9,531	53,962
2021-01	54,173	9,961	64,134
2021-02	53,444	10,582	64,026

Table 35. Total Enrollment Results for Graduate School Master Degree Programs (2015-2021)

Year	Total Enrollment
2015	1,402
2016	1,536
2017	1,256
2018	1,220
2019	1,395
2020	1,625
2021	2,240

IX.   Completion Results within 100% and 150%

See below the definitions used to calculate the results for completion within 100% and 150% for undergraduate programs:

- **Completion within 100%** is estimated considering the number of students who havecompleted the curricular plan at 100% of the time of graduation expected for the program over the total incoming students for each admission cohort, respectively.

- **Completion within 150%** is estimated considering the number of students who havecompleted the curricular plan at 150% of the time of graduation expected for the program over the total incoming students for each admission cohort, respectively.

Table 36 presents the institutional completion results within 100% and 150% for undergraduate programs. Completion results within 100% in 2021-01 show that 13.9% of undergraduate students graduated at the expected time and 40.2% at 150% of the expected time of graduation (considering an expected time of graduation of 5 years, students of the second group graduated after 7.5 years, for instance).

The institutional completion results within 100% and 150% of time are estimated by weighting the completion results of each program and the total number of graduate students per program who graduated within 100% and 150%.

Table 36. Graduation Results within 100% and 150% for Undergraduate Programs

Period	Number of Graduate students within 100%	Number of Graduate students within 150%	Completion within 100% (Percentage)	Completion within 150% (Percentage)
2021-01	583	2712	13.9	40.2
2020-01	602	2433	12.2	34.6
2019-01	452	1380	14.7	34.7
2018-01	387	1259	13.6	35.9
2017-01	345	1198	12.6	36.0
2016-01	335	982	14.2	36.1
2015-01	297	810	14.1	35.2
2014-01	216	762	13.3	36.3
2013-01	227	643	14.2	35.8

Note: These results include both Traditional Undergraduate and Working Adult Undergraduate Programs.

To attain their Master's degree, students must complete the curricular plan, submit, and defend their thesis, demonstrate proficiency in a second language at an intermediate level, and pay all administrative fees. See below the definitions used to calculate the results for completion within 100% and 150% for master's degree programs:

- **Completion within 100%** is estimated considering the number of students who have fulfilled graduation requirements at 100% of the expected time (four years: 02 years of studies and 2 years to complete the thesis), over the total incoming students for each admission cohort, respectively.

- **Completion within 150%** is estimated considering the number of students who have fulfilled graduation requirements at 150% of the expected time (six years), over the total incoming students for each admission cohort, respectively.

Table 37 presents the completion results within 100% and 150% for Master's Degree Programs.

Table 37. Graduation Results within 100% and 150% for Master's Degree Programs

Period	Completion within 100%(Percentage)	Completion within 150%(Percentage)
2021-02	45.8	*
2021-01	60.4	*
2020-02	53.3	*
2020-01	49.0	*
2019-02	35.7	53.5
2019-01	55.9	71.6
2018-02	45.6	56.6
2018-01	49.3	57.2
2017-02	28.2	39.1
2017-01	36.4	45.5
2016-02	37.9	49.7
2016-01	36.6	45.8

(*) currently in progress

X.   Faculty Qualifications and Distribution by Work Status

By semester 2021-02, UPC had 972 full-time faculty and 2,470 part-time faculty. This represents around 28% of full-time faculty and 72% of part-time faculty, respectively. Table 38 and table 39 show the evolution of the number of faculty by work status between 2018 and 2021.

Table 38. UPC Number of Faculty per Academic Semester (by Work Status)

Work Regime	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Full-time faculty	949	972	993	1,044	1,020	937	935	972
Part-time faculty	2,465	2,564	2,553	2,658	2,617	2,266	2,519	2,470
Total	**3,414**	**3,536**	**3,546**	**3,702**	**3,637**	**3,203**	**3,454**	**3,442**

Table 39. Percentage Frequency Distribution of UPC Faculty per Academic Semester (by Work Status)

Work Regime	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Full-time faculty	27.80%	27.49%	28.00%	28.20%	28.05%	29.25%	27.07%	28.24%
Part-time faculty	72.20%	72.51%	72.00%	71.80%	71.95%	70.75%	72.93%	71.76%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

In regard to the progress made in terms of faculty holding master's and doctoral degrees, Table 40 and table 41 show the evolution of faculty credentials between 2018 and 2021.

Table 40. UPC Number of Faculty per Academic Semester (by Academic credentials)

Degree	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Doctoral Degree	208	221	236	252	238	226	244	275
Master's Degree	1,936	2,073	2241	2544	2618	2334	2723	2884
Bachelor Degree	1,177	1,155	995	840	724	586	432	233
No Degree	93	87	74	66	57	57	55	50
Total	**3,414**	**3,536**	**3,546**	**3,702**	**3,637**	**3,203**	**3,454**	**3,442**

Table 41. Percentage Frequency Distribution of UPC Faculty per Academic Semester (by Academic Credentials)

Degree	2018-01	2018-02	2019-01	2019-02	2020-01	2020-02	2021-01	2021-02
Doctoral Degree	6.09%	6.25%	6.66%	6.81%	6.54%	7.06%	7.06%	7.99%
Master's Degree	56.71%	58.63%	63.20%	68.72%	71.98%	72.87%	78.84%	83.79%
Bachelor Degree	34.48%	32.66%	28.06%	22.69%	19.91%	18.30%	12.51%	6.77%
No Degree	2.72%	2.46%	2.09%	1.78%	1.57%	1.78%	1.59%	1.45%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

XI.   Research Results

UPC is committed to promoting scientific research in all areas of knowledge of the university, and actively encourages the participation of faculty and students in research projects.

UPC's Research Director, who operates under the leadership of the Vice Rector for Academic Affairs and Research (VRAAR), is responsible for supervising and supporting all institutional research activities.

UPC organizes an Annual Research Contest (ARC), which aims to promote research among faculty. The ARC provides funding for faculty research projects. An ad hoc committee is appointed by the Research Office to review project proposals and recommend their funding to the VRAAR. The funding criteria are explicit about the quality expectations of faculty's intellectual contributions, which must be published in a peer-reviewed journal listed in ISI-Web of Science (WOS) or SCOPUS.

In 2021, UPC researchers carried out their activities remotely due to the health emergency context caused by COVID-19. Those research projects that required the use of laboratories and other face-to-face activities were carried out with the corresponding authorizations and under strict biosafety protocols established by the Government.

The main research results of UPC are presented below:

Research Ranking among Peruvian Universities:

1)   In 2011, UPC ranked **24th** among all 140 Peruvian universities (Source: Scimago)
2)   In 2013, UPC ranked **11th** among all 140 Peruvian universities (Source: Scimago)
3)   In 2017, UPC ranked **3rd** among Peruvian universities (Source: Scopus/Scimago)
4)   In 2018, UPC ranked **4th** among Peruvian universities (Source: Scimago Globe IR)
5)   In 2019, UPC ranked **2nd** among Peruvian universities (Source: Scimago Globe IR)
6)   In 2020, UPC ranked **2nd** among Peruvian universities (Source: Scimago Globe IR)
7)   In 2021, UPC ranked **7th** among Peruvian universities (Source: Scimago Globe IR) /
        and ranked **4th** among Peruvian universities (Source: Scimago Iber IR)

Annual Papers in Peer Review and Indexed Journals:

1)   In 2012, UPC published **32** papers in indexed journals (Source: Scopus)
2)   In 2013, UPC published **31** papers in indexed journals (Source: Scopus)
3)   In 2014, UPC published **72** papers in indexed journals (Source: Scopus)
4)   In 2015, UPC published **143** papers in indexed journals (Source: Scopus)
5)   In 2016, UPC published **150** papers in indexed journals (Source: Scopus)
6)   In 2017, UPC published **141** papers in indexed journals (Source: Scopus)
7)   In 2018, UPC published **231** papers in indexed journals (source: Scopus)
8)   In 2019, UPC published **363** papers in indexed journals (source: Scopus)
9)   In 2020, UPC published **465** papers in indexed journals (source: Scopus)
10)   In 2021, UPC published **444** papers in indexed journals (source: Scopus)

Five-Year Papers in Peer Review and Indexed Journals:

1)   During 2008-2012, UPC published **80** papers (Source: Scopus/Scimago)
2)   During 2009-2013, UPC published **110** papers (Source: Scopus/Scimago)
3)   During 2010-2014, UPC published **177** papers (Source: Scopus/Scimago)
4)   During 2011-2015, UPC published **306** papers (Source: Scopus/Scimago)
5)   During 2012-2016, UPC published **428** papers (Source: Scopus/Scimago)
6)   During 2013-2017, UPC published **537** papers (Source: Scopus/Scimago)
7)   During 2014-2018, UPC published **737** papers (Source: Scopus/Scimago)
8)   During 2015-2019, UPC published **1,028** papers (Source: Scopus/Scimago)
9)   During 2016-2020, UPC published **1,383** papers (Source: Scopus/Scimago)
10)   During 2017-2021, UPC published **1,734** papers (Source: Scopus/Scimago)

Students in Research:

1)   In 2015, 90 students participated in research projects (Source: Research Office, UPC)
2)   In 2016, **110** students participated in research projects (Source: Research Office, UPC)
3)   In 2017, **130** students participated in research projects (Source: Research Office, UPC)
4)   In 2018, **245** students participated in research projects (Source: Research Office, UPC)
5)   In 2019, **320** students participated in research projects (Source: Research Office, UPC)
6)   In 2020, **514** students participated in research projects (Source: Research Office, UPC)
7)   In 2021, **680** students participated in research projects (Source: Research Office, UPC)

UPC Patents (Cumulative results):

1) In 2017, **01** UPC Patents registered in Indecopi and Patentscope
2) In 2018, **05** UPC Patents registered in Indecopi and Patentscope
3) In 2019, **21** UPC Patents registered in Indecopi and Patentscope
4) In 2020, **39** UPC Patents registered in Indecopi and Patentscope
5) In 2021, **59** UPC Patents registered in Indecopi and Patentscope

XII.   Social Responsibility Impact

In 2021, UPC developed various sustainability initiatives to manage its organizational impact and contribute the UN's Sustainable Development Goals to benefit its stakeholders. Said initiatives involved the participation of students, faculty members and administrative staff. Table 42 shows the main results in terms of sustainability impact in 2021.

Table 42. UPC's Sustainability Impact (2021)

Indicator	Result
Total Investment in sustainability initiatives (*)	PEN 42,332,507.57
Number of students who participated in UPC's sustainability initiatives (**)	3,026

Note (*): This amount does not include Scholarships neither Financial Aid, which are reported by the Credits and Collections Department.

Note (**): UPC Students participate in sustainability initiatives related to the following areas: Ethics and Integrity enhancement activities; Human Rights Defence; Diversity and Inclusion; Local Community Positive Impact; Environmental Efficiency; Human Capital Development activities; Environmental Management; Responsible Consumption; Sustainable Innovations; Climate Change; Labor and Decent Work; Students and clients management; Sustainable Suppliers Management; and Sustainable Products and Services Development.

12.1   Main Achievements in 2021:

- UPC obtained the International certification ISO 37001 - Anti-bribery Management System, which ensures efficient anti-bribery and anti-corruption management practices and allows reducing and avoiding risks related to the latter, by applying robust control mechanisms throughout the value chain processes (link).

- UPC signed a Memorandum of Understanding (MOU) with the United Nations (UN), reiterating its commitment to carry out joint actions to disseminate the 2030 Agenda and Sustainable Development Goals (link).

- UPC approved its Policy on Sustainability and Academic Social Responsibility, which seeks to incorporate an approach towards sustainability into the organization's value chain, and to strengthen UPC's commitment to fulfill the UN's Sustainable Development Goals.

- By late 2021, UPC has entered the Board of Trustees of Peruvian Sustainable Businesses, a network that seeks to promote sustainable management practices within organizations and the UN's Sustainable Development Goals, as they are crucial to realizing a sustainable society.
- UPC inaugurated the 21st edition of the International Congress of Educators, which allows sharing, discussing, understanding, and subsequently applying the latest trends in educational innovation. More than 1,800 participants attended the 2021 edition and more than 400 professors from public and private institutions were awarded scholarships ([link](#)).

- UPC held the 11th edition of the *Protagonistas del Cambio UPC* [UPC Champions of Change]. Ten social entrepreneurs from various regions of Peru received advice, mentoring, training, and workshops to grow their social enterprises at an early stage ([link](#)).

- UPC held the 25th edition of the Business Creativity Award, which fosters the development of a culture of creativity and continuous innovation to be maintained over time ([link](#)).

- UPC carried out external and internal audits within the framework of the ISO 14001 - Environmental Management System, demonstrating the University's commitment to providing students with environmentally responsible campuses, sites, and spaces for environmental education to combat climate change. UPC is also an active member of the Inter-University Environmental Network, made up of public and private universities, which promotes the integration of the environmental dimension within Peru's universities as a way of contributing to Peru's environmental management and policy in a sustainable manner.

- As of 2021, UPC has started to implement its "UPC Zero Plastic Campus" initiative, which seeks to eradicate and reduce the use of plastic in all its academic and administrative processes. In the first stage, efforts have been made with food concessionaires to identify opportunities for improvement in terms of environmental management of plastic and its replacement with more eco-friendly materials.

XIII. NPS UPC Results

UPC incorporated the NPS (Net Promoter Score) as a KPI of student overall satisfaction. The NPS is built from the question "Based on your experience at UPC, would you recommend it to a friend or family?". It is measured on a Likert Scale 0-10 being a promoter if you answer 9 or 10 and a detractor if you answer from 0 to 6. The NPS is the score that results from %promoters - % detractors. The 2021 NPS result, presented in Table 43, was achieved by UPC's commitment to academic excellence and the student learning experience.

Table 43. NPS UPC Results (2016-2021)

Indicator	Description	2016	2017	2018	2019	2020	2021
NPS (Net Promoter Score) %	Measures student recommendation and satisfaction level on a scale of 0 to 10. NPS= % Students with scores between 9 and 10 - % students with scores between 0 and 6.	17	20	15	16	21	35