

LACCEI 2025, MEXICO CITY



Mexico City has been selected as the venue for the 23rd International Multi-Conference on Engineering, Technology, and Education, **LACCEI 2025**, the OAS “*Engineering Center of Excellence for the Americas*,” which will take place from July 14 to 18, 2025. This world-renowned event will bring together leading engineers, students, educators, researchers, and special guests from around the world to share knowledge, innovations, and advances in all areas of engineering.

The Barceló Hotel, located in the heart of Mexico City, will be the central venue for this prestigious multi-conference. The choice of this hotel not only offers a comfortable and modern environment for attendees but also reflects the vibrant mix of history and modernity that characterizes the city.

“**The Barceló México Reforma** hotel is located in the center of Mexico City, just a few steps from the Monument to the Revolution, very close to numerous symbols of financial and commercial interest, 20 minutes from the Benito Juárez International Airport, and surrounded by a varied architectural style, among vestiges of modernism and works of contemporary architecture.”

Participants will be able to enjoy the rich cultural history and modern infrastructure that Mexico City has to offer and participate in a series of conferences, workshops, and panels that will address the most pressing challenges and opportunities in engineering and technology.

The LACCEI 2025 Multiconference is a unique opportunity to network, collaborate on international projects, and be at the forefront of global trends shaping our industries' future. More details about registration, featured speakers, and scheduled activities will be released closer to the date.

We look forward to your participation in this momentous event in Mexico City. **See you at LACCEI 2025!**

LEIRD STUDENT COMPETITIONS EXTENSION 2024



Student Entrepreneurship and Innovation Projects Competition. The new deadline for the first phase: is September 16.

This competition aims to motivate the entrepreneurial spirit among university students and stimulate the achievement of their academic goals through the development of innovative entrepreneurship projects.

The competition consists of three phases: Presentation and description of the project, Pre-incubation process for the 10 best projects, and Presentation of the final work. Cash prizes for the three best projects.

ACHIEVEMENTS AND ACTIVITIES 2024 – 2025



Throughout 2024, we have witnessed a year full of remarkable achievements and significant progress in our engineering and entrepreneurship initiatives. Thanks to the dedication and collective effort of all of you, we have reached important milestones that have strengthened our position as leaders in academic and research management with other institutions internationally, promoting global collaboration for the continued advancement of engineering, technology, education, research, practice, and innovation, connecting Latin America and the Caribbean with the rest of the world.

From the success of our student competitions, which have highlighted the ingenuity and creativity of younger generations, to the growth of our collaborative networks and annual Multiconferences, each achievement is a testament to our community's unwavering commitment to driving innovation and excellence.

Looking ahead to the next 12 months, we are excited about the plans we have in place to continue this successful trajectory. Our focus will be on expanding our initiatives, fostering **the engagement of our members**, and continuing to foster an enabling environment for innovation and professional development in engineering and entrepreneurship.

Below is a detailed summary of our achievements in 2024 and the plan of activities that will guide our actions in the coming year. We count on your support and participation to continue building a bright future for our academic community together.

Achievements for members – 2023-2024:

- Support from the OAS to our members, as the Center of Excellence for Engineering in the Americas.
- Networking with LACCEI member institutions and other attendees at the Multiconferences.
- Opportunity to create national and regional Deans' Councils and integration with colleagues.
- Prospective study for LACCEI 2032, the economy in engineering.
- Free registrations at the LACCEI Multiconferences (hybrid), LEIRD (virtual) in July and December; in all Student Competitions (virtual) and in the 3MT virtual Competition (Master's and Doctoral Thesis).
- Discounts on presentations, workshops (EUR-ACE) and seminars.
- Participation in Committees and Initiatives.
- Monthly webinars.
- Creation of student chapters.
- 5 student competitions and Bootcamp 2024.
- Scientific writing workshop for publication purposes.
- Full Papers indexing in Scopus.
- Indexing of papers in Google Scholar, Dimensions, AXCES

Plan of activities (August 2024-July 2025):

- ❖ SEPTEMBER:
 - Delivery of the set of recommendations to the OAS with the contribution of the entire Consortium.
- ❖ OCTOBER:

- Creation and call for the “International Journal of Engineering for the Americas.”.
- Call for Papers of the “23rd International Multiconference on Engineering, Technology and Education” (LACCEI 2025), Mexico.
- Organization of LEIRD 2025 (hybrid modality).
- Scientific writing workshop for professionals.

❖ JANUARY:

- Training of the Teacher Training Plan for Engineering.

❖ MARCH:

- Workshop on economic growth and institutional developments with Dr. Ricardo Hausmann, director of the Harvard Economic Growth Laboratory (The Growth Lab Harvard Kennedy School). It will be face-to-face only and only one representative per member institution. Invitations with the proposed training plan will be sent out in November.

- Foresight studies for LACCEI 2042 and LACCEI 2052.

❖ JULY:

- First meeting of the International Relations Offices (ORI) of the engineering institutions of the Americas.
- Hybrid Delphi (foresight) studies.
- EUR-ACE accreditation workshop (in person in Mexico City at the LACCEI 2025 Multiconference).
- ABET accreditation workshop (in person in Mexico City at the LACCEI 2025 Multiconference).
- LACCEI 2025 workshops.

Other benefits:

- Discounts on registrations for the LACCEI Multiconferences, LEIRD, student competitions, 3MT competitions, and workshops.
- Incubation process for the 10 best student projects in Entrepreneurship and Innovation at LEIRD 2024.
- Technological observatories and alerts.
- Full Papers indexing in Scopus.
- Indexing of papers in Google Scholar, Dimensions, AXCES

We invite you to participate in the 8 Standing Committees of LACCEI:

1. Permanent International Committee on Entrepreneurship and Innovation (CIPEI).
2. International Accreditation.
3. Internationalization and Interculturally.
4. Learning Engineering and Online Laboratories.
5. Prospective and Future Studies.
6. Sustainability & Social Impact.
7. Technological Development & Transfer.
8. Women in STEM.



RECOGNIZING STUDENT EXCELLENCE IN ENGINEERING AND ENTREPRENEURSHIP 2024

LACCEI is proud to announce the winners of the 2024 student competitions, a testament to the talent, dedication, and innovation of the next generation of engineers and entrepreneurs.

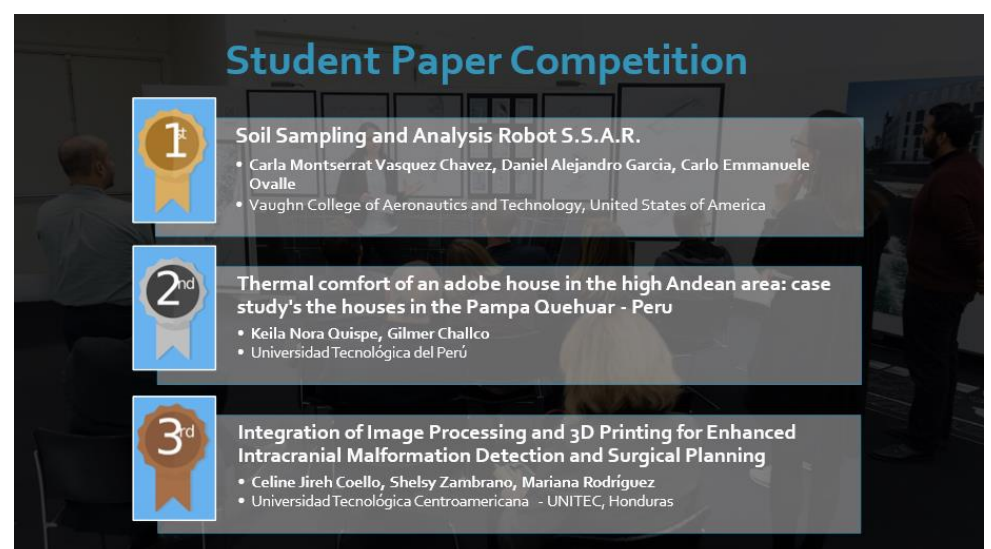
Each year, students from around the world compete in five categories spanning diverse disciplines of engineering and entrepreneurship, tackling complex challenges and demonstrating their ability to develop creative and effective solutions.

This year’s winners have not only demonstrated exceptional technical skills, but also an unwavering commitment to advancing knowledge and improving society.

Their success reflects their hard work and passion for engineering, as well as the quality of the education they have received.

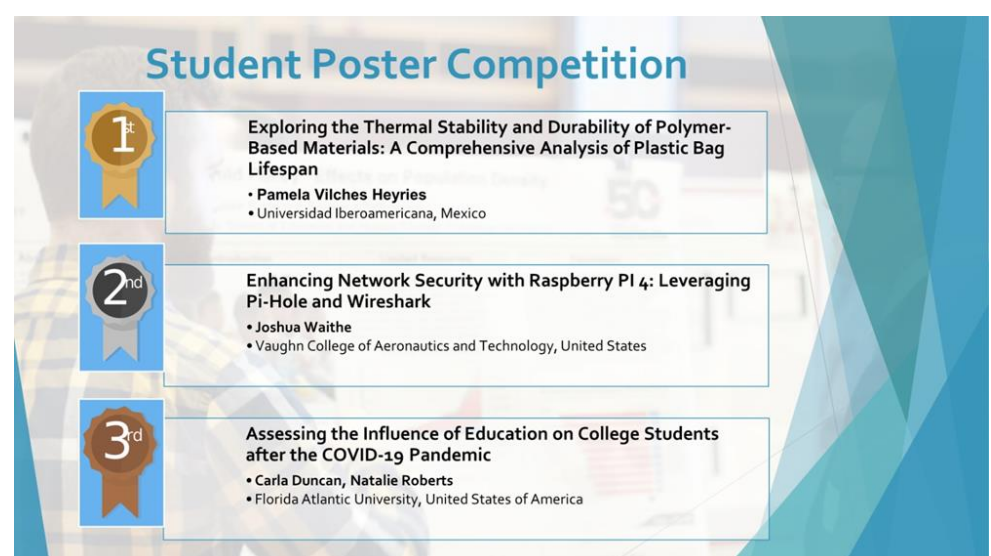
We are pleased to award them with cash prizes and the international recognition they deserve, hoping that this is just the beginning of bright and accomplished careers. We congratulate all participants and thank them for their contribution to the future of engineering and entrepreneurship.

LACCEI Student Competition 2024



Student Paper Competition

- 1st** **Soil Sampling and Analysis Robot S.S.A.R.**
 - Carla Montserrat Vasquez Chavez, Daniel Alejandro Garcia, Carlo Emmanuele Ovalle
 - Vaughn College of Aeronautics and Technology, United States of America
- 2nd** **Thermal comfort of an adobe house in the high Andean area: case study's the houses in the Pampa Quehuar - Peru**
 - Keila Nora Otuspe, Gilmer Challco
 - Universidad Tecnológica del Perú
- 3rd** **Integration of Image Processing and 3D Printing for Enhanced Intracranial Malformation Detection and Surgical Planning**
 - Celine Jireh Coello, Shelsy Zambrano, Mariana Rodriguez
 - Universidad Tecnológica Centroamericana - UNITEC, Honduras



Student Poster Competition

- 1st** **Exploring the Thermal Stability and Durability of Polymer-Based Materials: A Comprehensive Analysis of Plastic Bag Lifespan**
 - Pamela Vilches Heyries
 - Universidad Iberoamericana, Mexico
- 2nd** **Enhancing Network Security with Raspberry Pi 4: Leveraging Pi-Hole and Wireshark**
 - Joshua Waithe
 - Vaughn College of Aeronautics and Technology, United States
- 3rd** **Assessing the Influence of Education on College Students after the COVID-19 Pandemic**
 - Carla Duncan, Natalie Roberts
 - Florida Atlantic University, United States of America



3MT LACCEI

- Maestría:**
 - Effect of the type of fermentation and style on chemometrics of commercial Mexican beers
 - Jorge Abraham, Clorio-Carrillo
 - Tecnológico de Monterrey - México
- Doctorado:**
 - Multi-omic analysis of a microalga after 13 years of acclimation under high-CO₂ for flue gas mitigation and high-value byproduct generation
 - Mora Godínez, Shirley
 - Tecnológico de Monterrey - México



LACCEI First Virtual Hackathon

- 1st** Implementation of a monitoring system for electrical parameter such as DC voltage and UPS battery charge percentage to prevent possible interruptions in electrical service using IoT and ThinkSpeak
 - Avengers (Polytechnic University of the Litoral (ESPOL) - Ecuador)
 - Jorge Sebastian Mendez-Indacochea, Christopher Ariel Romero-Lamboglia, and Maria Paula Chávez-Berreno
- 2nd** Solid waste monitoring through IoT technologies and MatLab
 - SASIM+ (University of Monterrey - México)
 - Karla Lisette Antonio Pérez, Fernando Sebastián Castro Ovalle, and Contreras González, Dante Antonio García Rosales
- 3rd** Low consumption IoT water quality station for Lake Yojoa
 - ElectroGallos (Universidad Tecnológica Centroamericana (UNITEC) - Honduras)
 - Fernando Alacon, and Owen Paz

Bootcamp 2024

First three places:

1. Lautaro Figueredo, UTN, Argentina – Recycling and Circular Economy Platform
2. Isabel Agreda, UPC, Peru – Biosensor and Algorithm Design to Detect and Predict Alzheimer's
3. Victoria Ojeda, UTN, Argentina – ODS Sports Engineering with ODS and Sports

Honorable mentions:

- Edwin Arevalo, Politécnico Grancolombiano, Colombia – Optimization of the Royalty Project Management Tool
- Nicole Buitrago, Politécnico Grancolombiano, Colombia – Efficiency Strategies in Tamale Production

LEIRD 2023 Winners

1. Caytairo Silva, Nicolás Esleyder; Peña Alejandro, Jackeline Melady, Catholic University of Santa María – (PE), Peru – Low-cost and economical assistive device for people with visual disabilities in Arequipa
2. Teheran Vargas, Isabella Andrea, Technological University of Bolívar – (CO), Colombia – Application that allows generating early alerts of mental health problems
3. Estela Becerra, Angie Melissa; Arrunategui Ayala, Rut Marycielo; Castillo Mosquera, Pierina Ailen; Flores Barreno, Karla Elvira, University of San Martín de Porres – (PE), Peru – UKUMAYU COFFEE – PERUVIAN FILTER COFFEE



- 1** **Proyecto:** Dispositivo de Asistencia Económico y de bajo costo para Personas con Discapacidad Visual en Arequipa
Nombres: Caytairo Silva, Nicolás Esleyder; Peña Alejandro, Jackeline Melady
IES: Universidad Católica de Santa María - (PE), Perú
- 2** **Proyecto:** Aplicación que permite generar alertas tempranas de problemas de salud mental
Nombres: Teherán Vargas, Isabella Andrea
IES: Universidad Tecnológica de Bolívar - (CO), Colombia
- 3** **Proyecto:** "UKUMAYU COFFEE – CAFÉ FILTRANTE PERUANO"
Nombres: "Estela Becerra, Angie Melissa; Arrunategui Ayala, Rut Marycielo; Castillo Mosquera, Pierina Ailen; Flores Barreno, Karla Elvira"
IES: Universidad de San Martín de Porres - (PE), Perú

II ATLANTIC AWARD FOR THE BEST DOCTORAL

The Research Center for Telecommunication Technologies,atlanTTic, announces the second edition of a national award in collaboration with the Spanish section of the IEEE to recognize the work done by researchers whose doctoral thesis represents a

significant advancement in the field of telecommunication technologies

This award recognizes contributions that, based on innovation, creativity, originality, and scientific rigor in the field of telecommunication technologies, demonstrate a high capacity for advancing knowledge in these disciplines. Moreover, it will also serve as an additional incentive for researchers working in this field.

Requirements of applicants

To apply for the award, interested candidates from any nationality must hold a doctoral degree and have defended their doctoral thesis in the field of telecommunication technologies (communications, digital services, and/or cybersecurity) at any Spanish university between January 1 and December 31, 2023.

Additionally, they must have achieved the highest qualification (excellent cum laude) for their thesis and have published 2 articles in JCR Q1/Q2 journals, or alternatively, have a patent in operation based on research conducted within the context of their doctoral thesis in the field of telecommunication technologies.

Information:

<https://secretaria.uvigo.gal/uv/web/convocatoria/public/show/1407>



"Creating solutions for a sustainable future: technology-based entrepreneurship"

EXTENSION Entrepreneurship and Innovation Student Competition

LEIRD 2024

December 2 - 4, 2024

NEW Deadline: September 16th

