USS — Universidad Señor de Sipán

ICACIT SYMPOSIUM

11TH ICACIT SYMPOSIUM 2025

October 15-17th | Chiclayo, Peru

Co-Organizer:
USS — Universidad Señor de Sipán

Organizer:
ICACIT

Technical Sponsor:
IEEE

![ICACIT SYMPOSIUM logo]

The 11th International Symposium on Accreditation of Engineering and Computing Education – ICACIT is the most important educational quality and accreditation event in Latin America. A space to share knowledge and experiences in accreditation, education, and continuous quality improvement among professionals from academia, industry and government. The event will be held in Hybrid mode.

| Program

Call for Papers

In the 11th edition, the Symposium's Call for Papers aims to continue promoting research on quality and accreditation in the education of engineers and professionals in the field of computing. The accepted papers presented orally at the event will be indexed in the IEEE Xplore Digital Library.

Workshops

Led by professionals with great experience and internationally recognized. Workshops will be developed to offer you the tools and guidance to implement and maintain continuous improvement processes in higher education programs.

Self-Study Exhibition

Only at the Symposium will you have access to a room with self-study reports of programs accredited by ICACIT. The self-study reports chosen do not necessarily demonstrate full compliance with the ICACIT criteria. However, they fulfill the purpose of exemplifying how to prepare the self-study report.

Co-organizer

Founded in 1999 in Chiclayo, Universidad Señor de Sipán is a private institution recognized as a leader in northern Peru. Dedicated to academic excellence and innovation, it promotes research, cultural identity, and social responsibility, preparing professionals to contribute to regional and national development while remaining connected to the global academic community.

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| Keynote Speakers

Ph.D. Edmundo Tovar

Past President

IEEE Education Society

Ph.D. Isabel Hilliger

Director of the Design
Engineering Unit

*Pontificia Universidad
Católica de Chile*

Ph.D. Carlos Rodriguez

Academic Vice Dean of
the Faculty of Engineering

*Universidad de los Andes
de Colombia*

Ph.D. Sandro Paz

General coordinator of
accreditation and continuous
improvement of the Faculty
of Sciences and Engineering

*Pontificia Universidad
Católica del Perú*

Ph.D. Francisco Palma

President of the Engineering
Accreditation Committee

ICACIT

"USS opens its doors to welcome interna-
tional speakers and participants to this
high-level academic event."

Dr. Alejandro Cruzata Martínez
Chancellor of USS

USS Universidad
Señor de Sipán

🏆 Ranked 50th in Peru

🥇 Ranked 1st in Chiclaya

🥇 Top 11 private universities in Peru

| University Campus Sketch

Main
Auditorium

Information Center
Classroom B502

Auditorium
Dra. Carmen Rosa
Núñez Campos

📍 Address: Km 5 Carretera a Pimentel, Chiclayo – Perú.

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Wednesday, October 15th (Afternoon)

	Auditorium Dra.Carmen Rosa Núñez Campos	Hall of Auditorium Dra. Carmen Rosa Nuñez Campos	Information Center Classroom B502
3:00 - 3:15 pm.			
3:15 - 3:30 pm.			
3:30 - 3:45 pm.			
3:45 - 4:00pm.	WORKSHOP N 01 "Implementando el Modelo de Calidad Internacional ICACIT" Jimmy Túllume Salazar - General Manager ICACIT	Registration and Materials Distribution (Hall of Auditorium Dra. Carmen Rosa Nuñez Campos) 03:00 p.m. a 6:00 p.m.	Exhibition of Self-study
4:00 - 4:15 pm.			
4:15 - 4:30 pm.			
4:30 - 4:45 pm.			
4:45 - 5:00 pm.			

PANEL

"Transformando la Educación en Ingeniería para la Era de la Inteligencia Artificial"

1. Dr. Alejandro Cruzata Martínez, Rector de la Universidad Señor de Sipán.
2. Enrique Alvarez Rodrich, Presidente del Consejo Directivo ICACIT.
3. PhD. Carlos Francisco Rodríguez, Vicedecano Académico de la Facultad de Ingeniería en la Universidad de los Andes.
4. PhD. Edmundo Tovar Caro, Past Presidente de la Sociedad de Educación del IEEE.
5. PhD. Isabel Hilliger Carrasco, Directora de la Unidad de Ingeniería en Diseño de la Pontificia Universidad Católica de Chile.

(Auditorium Dr. Carmen Núñez Campos)

5:00 - 6:00 pm.

Opening of the ICACIT 2025 Symposium
(Auditorium Carmen Rosa Nuñez Campos)

Dinner Openning

6:00 - 7:00 pm.

Thursday, October 16th (Morning)

	Auditorium Dra.Carmen Rosa Núñez Campos	Auditorium Principal USS	Centro de Información Aula: B502
9:00 - 9:15 am.	**Paper ID 15** Enfoque metodológico novedoso: la deserción universitaria basada en la permanencia estudiantil 🇨🇱 *Juan Barriga Jara*		
9:15 - 9:30 am.	**Paper ID 65** Professional Obsolescence Anxiety and the Use of Generative AI in Engineering Students: A Sequential Mediation Model 🇵🇪 *Nicolas Andres Nuñez Morales*		
9:30 - 9:45am.	**Paper ID 66** More AI, Less Learning? The Role of Technological Self-Efficacy in STEM Education 🇵🇪 *Nicolas Andres Nuñez Morales*		
9:45 - 10:00 am.	**Paper ID 72** Proposed basic guidelines and UML framework for the inclusion of students with ASD in STEM engineering programs 🇨🇱 *Carolina María José Reinecke*	WORKSHOP N 02 "Estrategias de Divulgación para la Investigación en Educación en Ingeniería: Del Aula a la Comunidad" PhD. Isabel Hilliger Universidad Católica de Chile - Director of the Design Engineering Unit Pontificia Universidad Católica de Chile	Exhibition of Self-study
10:00 - 10:15 am.	**Paper ID 46** Analyzing the Perceptions and Interactions of Students with Generative AI in Engineering Courses: A Preliminary Study and Insights 🇨🇴 *Jonathan Álvarez Ariza*		
10:15 - 10:30 am.	**Paper ID 47** Low-cost Portable Solar Photovoltaic and Wind IoT Laboratory for Engineering and Energy Education 🇨🇴 *Jonathan Álvarez Ariza*		
10:30 - 10:45 am.	**Paper ID 3** Integrating ISO 31022:2020 into Scientific Communication and Legal Risk Management in Educational Contexts 🇵🇪 *Willynthom Jesús Alois Vargas*		
10:45 - 11:00 am.	**Paper ID 19** Commupics: Aplicación móvil basada en el modelo GPT-4 para apoyar la comunicación en niños con trastorno del espectro autista de 5 a 12 años 🇵🇪 *Lennin Daniel Huaman Huaranga*		
11:00 - 11:15 am.	**Paper ID 73** Prediction of Pedagogical Improvement through University Teacher Training with Machine Learning T- 🇵🇪 *Maglioni Arana Caparachin*		
11:15 - 11:30 am.	**Paper ID 76** Integrating Power BI and PLS-SEM dashboards to model vocational expectations, tutorial quality, and academic problems in higher education 🇵🇪 *Maglioni Arana Caparachin*		
11:30 - 11:45 am.	**Paper ID 2** Project-Based Learning for Teaching Natural Language Processing in Undergraduate Computing 🇧🇷 *Thiago Goulart de Oliveira*		
11:45 - 12:00 pm.	**Paper ID 24** Self-assessment and the Development of Socio-emotional Competencies in First-year Computing S- 🇧🇷 *Julia Stateri*		
12:00 - 1:00 pm.	KEYNOTE SPEAKER 01 "Evaluación de Competencias en Ingeniería en la Era de la IA: Tendencias y Oportunidades" PhD. Isabel Hilliger Pontificia Universidad Católica de Chile - Director of the Design Engineering Unit		

Thursday, October 16th (Afternoon)

	Auditorium Dra. Carmen Rosa Núñez Campos	Main Auditorium USS	Center Information Classroom B502
1:00 - 3:00 pm.	**Free time for lunch**		
3:00 - 3:15 pm.	**Paper ID 62** Competency Design and solution development in complex engineering problems 🇵🇪 *Javier Hugo Morán Ruiz*		
3:15 - 3:30 pm.	**Paper ID 48** Engineering Education with a Gender Perspective: Student Perceptions at the School of the Engineering at a highly selective Latin American university 🇨🇱 *Luis Eduardo Vargas Vidal*		
3:30 - 3:45 pm.	**Paper ID 61** Advancing Robotics Education with Novel, Practical Teaching Approaches 🇩🇪 *Johannes Lamm*		
3:45 - 4:00pm.	**Paper ID 64** Integrating Robotics into University Curriculum: Driving the Future of Robotics Education 🇩🇪 *Waltersbacher Robin*	WORKSHOP N 03 "Buenas Practicas en el Diseño, Medición y Evaluación de Atributos del Graduado" PhD. Martín Palma Lamas - President of the Engineering Accreditation Committee ICACIT	*Exhibition of Self-study*
4:00 - 4:15 pm.	**Paper ID 78** Prompting Analysis for Programming Exercises in Computer Science Courses 🇵🇪 *Evie Nataly Díaz Quevedo*		
4:15 - 4:30 pm.	**Paper ID 83** Impact of continuous improvement plans on student outcomes in an Environmental Engineering Program 🇵🇪 *Elizabeth Cecilia Oré Núñez*		
4:30 - 4:45 pm.	**Paper ID 85** Comparative analysis of accreditation models: normative and methodological convergences between SINEACE, ICACIT and CNA Colombia 🇵🇪 *Jhon Antony Tarazona Ponte*		
4:45 - 5:00 pm.	**Paper ID 86** Application of the Software as a Service (SaaS) Model in the optimization of the collection system in a company in the banking sector 🇵🇪 *Abelardo Andy Ayesta Cárdenas*		
5:00 - 6:00 pm.	KEYNOTE SPEAKER 02 "Más allá de los rankings: construyendo confianza y excelencia con sistemas de aseguramiento de calidad" PhD. Sandro Paz Collado Pontifica Universidad Católica del Perú - General Coordinator of Accreditation and Continuous Improvement of the Faculty of Science and Engineering (Auditorio Dr. Carmen Núñez Campos)		
6:00 - 7:00 pm.	*Culture Night* (Auditorio Dr. Carmen Núñez Campos)		

Friday, October 17th (Morning)

	Auditorium Dra.Carmen Rosa Núñez Campos	Main Auditorium USS	Center Information Classroom B502
9:00 - 9:15 am.	**Paper ID 17** Análisis exploratorio de datos sobre la empleabilidad de los graduados de BSCS y BSIT de una universidad estatal en Filipinas — *Kezia Abegail Velasco*		
9:15 - 9:30 am.	**Paper ID 49** Project-Based Learning with Real-World Projects for Requirements Engineering Education: A Case Study at a University in Lima, Peru — *Enrique Chiroque-Zanabria*		
9:30 - 9:45am.	**Paper ID 81** Engineering Students' Perceptions of Their Emotional Intelligence Training — *Yeimy Salvatierra Garcia*		
9:45 - 10:00 am.	**Paper ID 82** The Impact of Information and Communication Technology (ICT) Use on Renewable Energy Research and Environmental Sustainability in Higher Education — *Manuel Michael Beraún Espíritu*	WORKSHOP N 04 "Diseño del Proyecto Capstone en programas de Ingeniería" PhD. Carlos F. Rodríguez - Academic Vice Dean of the Faculty of Engineering Universidad de Los Andes Colombía	*Exhibition of Self-study*
10:00 - 10:15 am.	**Paper ID 63** Educational Tool for Optimizing Component Selection in Micro Hydroelectric Power Systems — *Joel Contreras Nuñez*		
10:15 - 10:30 am.	**Paper ID 70** Assessment of Student Competency Development in Research Seminar Modules: A Comparative Evidence from Two Peruvian Engineering Faculties — *Aris Malca Morales*		
10:30 - 10:45 am.	**Paper ID 71** Institutional Carbon Footprint Assessment to Foster Socio-Environmental Action: A Case Study at a University in Lima Norte, Peru — *Enrique Chiroque-Zanabria*		
10:45 - 11:00 am.	**Paper ID 29** Flight Training and Academic Performance interaction: A study in the context of Peruvian — *Fernando Heli Romero Laynes*		
11:00 - 11:15 am.	**Paper ID 35** Web-based programming challenge platform using generative AI to improve programming skills in undergraduate engineering students — *Angela Jesús Yarleque Belleza*		
11:15 - 11:30 am.	**Paper ID 36** Doctoral Students' Expectations Regarding the Accreditation of Their Doctoral Program in Peruvian Universities — *Pedro Jesús De Bracamonte*		
11:30 - 11:45 am.	**Paper ID 41** Improving University Service Quality through the Design of an MVP for the Automated Management of Non-Cognitive Points — *Fernando Isaac Morales Jave*		
11:45 - 12:00 pm.	**Paper ID 43** Educational Robotics to Enhance Technical Competencies in Industrial Process Automation Students — *Adriana Raida Vásquez Utani*		
12:00 - 1:00 pm.	KEYNOTE SPEAKER 03 "Del aula al metaverso: IA, laboratorios remotos y tecnologías emergentes para formación de profesionales STEM" PhD. Carlos F. Rodríguez Universidad de Los Andes Colombía - Academic Vice Dean of the Faculty of Engineering		

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Friday, October 17th (Afternoon)

	Auditorium Dra.Carmen Rosa Núñez Campos	Main Auditorium USS	Center Information Classroom B502
1:00 – 3:00 pm.	**Free time for lunch**		
3:00 – 3:15 pm.	Paper ID 1		
3:15 – 3:30 pm.	Paper ID 25 — Design and Evaluation of Soft Skills Development for University Students Through COIL Methodology: A Longitudinal Case Study (2020 – 2025) — Eduardo Alonso Sánchez Ruiz	WORKSHOP N 05	Exhibition of Self-study
3:30 – 3:45 pm.	Paper ID 69 — Evaluation of the Impact of AI Use in Teaching Operating Cash Flow in the Industrial Engineering Program: A Comparative Study Between Traditional and Technological Methods — Jorge Enrique Castillo Cueva	"Estrategias para institucio-nalizar el aseguramiento de calidad"	
3:45 – 4:00pm.	Paper ID 26 — Analysis of the Demographic and Academic patterns of ICT competence in Engineering students using Data Mining — Vanessa Maribel Choque Soto	PhD. Sandro Paz Collado - General Coordinator of Accreditation and Continuous Improvement of the Faculty of Science and Engineering	
4:00 – 4:15 pm.	Paper ID 31 — Chemistry Experimentation to Attract K-12 Students to Chemical Engineering in Cusco, Peru — Uriel Raul Fernandez Bernaola	Pontificia Universidad Católica del Perú	
4:15 – 4:30 pm.	Paper ID 80		
4:30 – 4:45 pm.	Paper ID 23 — Improving Students' Success in CS1 Using Automated Descriptive Feedback — Saleh Alhazbi		
4:45 – 5:00 pm.	Paper ID 51		
5:00 – 6:00 pm.	KEYNOTE SPEAKER 04 — "Ingeniería con propósito: ODS, ética e innovación responsable en la formación STEM" — PhD. Edmundo Tovar — Sociedad de Educación IEEE - Past President (Auditorium Dr. Carmen Núñez Campos)		
6:00 – 7:00 pm.	*Closing of the ICACIT 2025 Symposium and Coctel Networking* — *(Auditorium Dr. Carmen Núñez Campos)*		

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Self-study Exhibition

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Educational institutions have granted ICACIT permission to display Self-Study Reports for some of their programs. Some of these documents have had certain confidential information removed.

The self-study report exhibition will be held in Room B502
(Information Center Pavilion, Building B, 5th Floor)

The room is located at Universidad Señor de Sipán
Addres: Km 5 Carretera a Pimentel, Chiclayo – Perú.

The room can be visited at the following times:

✓ Wednesday, October 15: 15:00 to 17:00
✓ Thursday, October 16: 09:00 to 12:00 and 15:00 to 17:00
✓ Friday, October 17: 09:00 to 12:00 and 15:00 to 17:00

Important

1 | Upon entering, you must hand over your PARTICIPANT CREDENTIAL to the person in charge of the room and leave your personal items in the area designated for this purpose.

2 | You must ask the person in charge of the room for one of the available reports and go to the reading tables carrying only a notepad and a pen that will be given to you during admission.

3 | All your electronic devices must have "silent" mode activated while you are in the room. To answer a call you must leave the room and return the report to the person in charge of the room.

4 | Feel free to review the reports and take notes on your pad at the reading tables. Self-Study Reports should not be removed from the room for any reason.

5 | Taking photographs or video recordings is NOT ALLOWED.

6 | Any participant who violates these rules will be sanctioned with expulsion from all Symposium activities and will lose their right to a certificate of attendance.

ID	Institution	Campus	Program	Evaluation Cycle
1			Ingeniería Agronómica	*Evaluation Cycle 2024*
2	Universidad Nacional Santiago Antúnez de Mayolo	Huaraz	Ingeniería de Minas	*Evaluation Cycle 2023*
3			Ingeniería Sanitaria	*Evaluation Cycle 2023*
4	UNIVERSIDAD RICARDO PALMA	Lima	Ingeniería Electrónica	*Evaluation Cycle 2023*
5			Ingeniería Informática	*Evaluation Cycle 2023*
6	UNIVERSIDAD DE PIURA	Piura	Ingeniería Industrial y de Sistemas	*Evaluation Cycle 2024*
7			Ingeniería Mecánico – Eléctrica	*Evaluation Cycle 2024*
8	UNIVERSIDAD SAN IGNACIO DE LOYOLA	Lima	Ingeniería en Industrias Alimentarias	*Evaluation Cycle 2024*
9			Ingeniería Civil	*Evaluation Cycle 2022*
10	Universidad Nacional Mayor de SAN MARCOS Universidad del Perú. Decana de América	Lima	Ingeniería de Seguridad y Salud en el Trabajo	*Evaluation Cycle 2023*
11			Ingeniería Textil	*Evaluation Cycle 2023*