IEOM

7th Latin American Conference on Industrial Engineering and Operations Management

~Panama City, Panama



August 4-6, 2026

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Industrial Engineering and Operations Management Society International

IEOM Society International, 21411 Civic Center Dr., Suite 205, Southfield, Michigan 48076, USA
Phone / WhatsApp: +1-734-530-7520, Email: info@ieomsociety.org

Welcome to the 7th South American International Conference on Industrial Engineering and Operations Management
Panama City, Panama, August 4-6, 2026

To All Conference Attendees:

The IEOM Society International is pleased to welcome you to the 7th South American International Conference on Industrial Engineering and Operations Management, Panama City, Panama, August 4-6, 2026. It is hosted by the Universidad Latina de Panamá and co-hosted by Quality Leadership University (QLU), Universidad Tecnológica de Panamá (UTP), Universidad de Panamá, and University of Central Florida (UCF). This year's conference highlights key and emerging areas, including artificial intelligence, supply chain management, logistics, Industry 4.0, the Internet of Things (IoT), lean systems, six sigma, simulation, data analytics, automation, and interdisciplinary research. The event serves as a global platform for academics, researchers, and industry practitioners to exchange ideas, present innovations, and discuss advancements in Industrial Engineering and Operations Management. The conference aims to foster collaboration, networking, and joint initiatives while advancing both the theory and practice of IEOM. We are delighted to share that the conference received about 200 submissions from 30 countries, with 145 papers and abstracts accepted for presentation. The event includes four panels and five workshops.

This year's program features a distinguished lineup of keynote speakers representing academia, industry, and global leadership. Their expertise and insights will provide valuable perspectives on contemporary challenges and future directions in industrial engineering and supply chain.

1. **Dr. Ying Xie –** Director of Logistics Cluster, University of Central Florida, USA
2. **Dr. Luis Rocha Lona** – Professor in Operations Management, National Polytechnic Institute of Mexico
3. **Dr. Ivan Garibay** – Associate Professor; Director, AI and Big Data Initiative, University of Central Florida
4. **Dr. Dario Solís** – Business Development Director for Innovation and Technology Partnerships, Arizona State University, Tempe, USA
5. **Dr. Juan Marcos Castillo** – Professor, Universidad Tecnológica de Panamá (UTP), Panamá
6. **Mr. Cristian Rincon** – Associate Professor and Researcher, UNIMINUTO, Colombia
7. **Dr. Mariana Leon** – Academic Vice President, Researcher, and Professor, Quality Leadership University – University of Louisville Panama
8. **Dr. Maria Auxiliadora Cannarozzo Tinoco** – Assoc. Prof., Industrial Eng., Universidade Federal do Rio Grande do Sul (UFRGS), Brazil
9. **Dr. Elida de Obaldía** – Prof., Universidad Tecnológica de Panamá and Representative of Panama's Adv Semiconductor Technology Center
10. **Dr. Enitza George** – Physician Executive; Health Systems Program Ambassador, STFM; Binghamton University, USA
11. **Dr. Fernando Gonzalez Aleu** – Professor and Researcher, Universidad de Monterrey (UDEM), Mexico
12. **Dr. Alfonso Sarmiento** – Associate Professor, Industrial Engineering**,** University of La Sabana, Colombia
13. **Dr. José Carlos Flores Molina** – Director, Quality Institute, Pontificia Universidad Católica del Perú (PUCP), Peru
14. **Dr. Luis Rabelo** – Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, USA
15. **Dr. Charles W. Davis, Jr.** – Associate Professor of Engineering, Embry-Riddle Aeronautical University, USA
16. **Dr. Edgar Gutierrez-Franco** – Associate Professor, Externado University of Colombia
17. **Pedro Heilbron**, CEO, Copa Airlines, Panama
18. **Jorge Salas**, CEO, Bladex – Banco Latinoamericano de Comercio Exterior (Foreign Trade Bank of Latin America), Panama

IEOM Society International continues to expand its global footprint, now operating in 188 countries, with more than 50,000 community members worldwide and supporting 307 student chapters across 60 countries. We remain committed to promoting student engagement, research excellence, and international collaboration.

We extend our sincere appreciation to José Barrios Ng, Oscar León, Dr. Maximiliano E. Jiménez Arbeláez, and Dr. Luis Rabelo for their dedicated support. Thanks to SENACYT for their scholarships to students and faculty. We also thank our keynote speakers, sponsors, partners, authors, reviewers, track chairs, advisors, committee members, and volunteers for their invaluable contributions in making this conference possible.

We are confident that this conference will be an intellectually enriching and collaborative experience for all participants.

We wish you a successful conference and an enjoyable, memorable stay in Panama.


José Barrios Ng
Universidad Latina de Panamá
(Chairman)


Oscar León
President, Quality Leadership
University (QLU), Panama


Dr. Humberto Alvarez
Universidad Tecnologica de
Panamá (UTP), Panama


Dr. Luis Rabelo
University of Central Florida,
Orlando, FL, USA


Dr. Maximiliano E. Jiménez
Arbeláez, Past Decano,
Universidad Católica Santa
María La Antigua de Panamá


Dr. Ahad Ali
Lawrence Technological
University, Michigan, USA


Professor Mario Chauca
National Technological University
of South Lima, Peru


Professor Don Reimer
Chief Operating Officer
IEOM Society International, USA

Keynote Speakers

August 4, 2026 (Day 1)

8:30 – 8:40, Tuesday, August 4, 2026 – Conference Opening



Ing. José Barrios Ng
President and Chairman of the Board
Universidad Latina de Panama

José Barrios Ng, co-founder and partner at ABCO Global, is a successful business director and entrepreneur.

He has worked as Director of Planning and Project Manager and/or Vice-President of Finance in companies such as ESSO, Cervecería Nacional (largest brewery in Panama), Cable & Wireless and the Panama Canal.

In 2002 José Barrios Ng joined the managing team at the Panama Canal Authority as Executive Vice President for Administration and Finance, where he was responsible for planning, financial analysis, risk management, administration of ACP contracts, and the strategy and policy design of financial continuous improvement. In 2007, he was appointed Deputy Administrator of the Panama Canal where he directed the group that managed the financing for the five billion dollar expansion project of the Panama Canal.

He currently acts as president and chairman of the board for one of the largest private universities in Panama, Universidad Latina de Panama. Under his leadership, enrollment at Universidad Latina has more than doubled. He is also board member of two other universities: Universidad Americana and UNESCPA, a university specialized in training and certifying public accountants.

José Barrios Ng serves as President for 4AB Distribution Company, and has served as President of the Panama Stock Market for 3 years, President for Optima Insurance, the media group Nueva Prensa Financiera (Capital Financiero newspaper), and the Panama Rotary Club. He is a member of the Board of Directors for numerous important enterprises including ABCO Global, Panama Metro, Panama Maritime Authority, the real estate trust Alianza Properties, and San Fernando Hospital, accumulating vast experience in diverse economic sectors.

José Barrios is a distinguished ex alumnus and member of the Advisory Board of the School of Engineering of Georgia Tech.

In 2014, he was awarded Doctor of Humanities, Honoris Causa, from Southeastern Louisiana University, and has received numerous other recognitions such as: Executive of the Year (Capital Financiero); Financial Executive of the year, 1996 & 2011 (Panama stock exchange); Outstanding Teaching Award 1997, 2000, 2001 (ULACIT); and Outstanding member award- Rotary Club of Panama, among others.

He is an Electrical Engineer from Louisiana State University, has a Master's degree in Electrical Engineering from Georgia Tech, and a Master's degree in Economic Engineering from the University of California—Los Angeles (UCLA), and completed additional post graduate studies in Operational Investigation at UCLA. He is currently pursuing a PhD at the University of Pennsylvania in Higher Education Administration.

8:40 – 9:20, Tuesday, August 4, 2026 - Keynote 1



Dr. Ying Xie
Director of Logistics Cluster
University of Central Florida (USA)

Ying Xie is currently the Director of the Logistics Cluster at the University of Central Florida. She was a Professor of Supply Chain Analytics at Cranfield University, United Kingdom. She is an internationally recognized leader in supply chain management, operations research, machine learning, big data analytics, and intelligent decision-support systems. She has held numerous senior academic leadership positions, including Director of the Centre for Intelligent Supply Chain and Head of School at Anglia Ruskin University, where she led strategic initiatives in research, education, and international partnerships. A Principal Fellow of Advance HE, Prof. Xie has successfully led and managed research and innovation projects funded by UK Research and Innovation (UKRI), Innovate UK, the European Union, and major industry partners. Her research focuses on digital supply chains, sustainable aviation, logistics, maritime systems, artificial intelligence, and supply chain resilience. She serves on several national strategic advisory boards and is widely recognized for fostering collaboration among academia, industry, and government to develop innovative, data-driven solutions that enhance global supply chain performance and sustainability. Dr. Xie earned her Ph.D. in Supply Chain and Operational Research from Coventry University, United Kingdom, and a Master of Science with Distinction in Intelligence Engineering from the University of Liverpool, specializing in Artificial Intelligence, Control Theory, and Fuzzy Systems.

9:20 – 10:00, Tuesday, August 4, 2026 - Keynote 2



Dr. Luis Rocha Lona
Professor in Operations Management, Business School
National Polytechnic Institute of Mexico
México City, Mexico

Luis Rocha-Lona is a professor in Operations Management at the Business School at National Polytechnic Institute of Mexico and at Tec de Monterrey, Campus Santa Fe. Luis Rocha graduated from the National Polytechnic Institute of Mexico (IPN) as Automation Control Systems Engineer. Then, he pursued an MSc in Control Systems with a major in information systems/manufacturing at the University of Sheffield, UK. He holds a PhD in Operations Management from The Manchester Business School. Dr Luis Rocha-Lona has eight years of working experience

in the public and private sectors. He has lead several projects involved with service and manufacturing organisations and is currently supervising Master and PhD students at National Polytechnic Institute of Mexico.

10:00 – 10:40, Tuesday, August 4, 2026 - Keynote 3



Dr. Ivan Garibay
Associate Professor
Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

Director, UCF Artificial Intelligence and Big Data Initiative
Director, Master of Science in Data Analytics
Director, Complex Adaptive Systems Laboratory
Founding Director, UCF I-Corps program
Affiliated appointments to Computer Science and Modeling and Simulation

Dr. Ivan Garibay is an Associate Professor at the Department of Industrial Engineering and Management Systems, University of Central Florida. He is the Director of UCF Artificial Intelligence and Big Data Initiative, Director of Master of Science Program in Data Analytics, and the Director of the Complex Adaptive Systems Laboratory. He is also the Founding Director of the UCF I-Corps program. His interests lie in studying complex socio-technical systems such as social media and artificial social intelligence. He received Ph.D. in Computer Science and M.S. in Computer Science from University of Central Florida, P.E. in Electronic Engineering (Titulo Profesional) and B.S. in Electronic Engineering from Ricardo Palma University, Peru.

10:40 – 11:00 - Break

11:00 – 11:30, Tuesday, August 4, 2026 - Keynote 4



Dr. Dario Solís
Business Development Director for Innovation and Technology Partnerships
Ira A. Fulton Schools of Engineering
Arizona State University (ASU)
Tempe, Arizona, USA

Dr. Dario Solís is the Business Development Director for Innovation and Technology Partnerships at the Ira A. Fulton Schools of Engineering at Arizona State University (ASU). In this role, he leads strategic initiatives that connect academia, industry, and government to accelerate innovation, workforce development, and technology-based economic growth. His work focuses on building partnerships that transform research into real-world impact while advancing emerging technology sectors.

Dr. Solís earned his Ph.D. in Mechanical Engineering from the University of Iowa and has built a distinguished career at the intersection of engineering, innovation, higher education, and public policy. Throughout his career, he has developed and led collaborative initiatives that strengthen advanced manufacturing, semiconductor and microelectronics ecosystems, entrepreneurship, and international research partnerships. His experience spans the United States and Latin America, where he has worked closely with governments, universities, and private industry to create sustainable innovation ecosystems that support talent development and long-term economic competitiveness.

A strong advocate for cross-sector collaboration, Dr. Solís is passionate about connecting people, institutions, and ideas to solve complex technological challenges. His expertise includes innovation strategy, technology partnerships, research development, workforce development, advanced manufacturing, and international collaboration. He has helped establish programs that align education, research, and industry needs to create opportunities for students, researchers, and technology-driven companies.

Dr. Solís is also recognized for his commitment to mentoring the next generation of engineers and technology leaders. He was the inaugural recipient of the American Society of Mechanical Engineers (ASME) McDonald Mentoring Award, a prestigious honor recognizing his outstanding and sustained commitment to mentoring and developing students and professionals.

11:30 – 12:00, Tuesday, August 4, 2026 - Keynote 5



Dr. Juan Marcos Castillo
Professor
Universidad Tecnológica de Panamá (UTP)
Panama

Presentation Title: The Potential Title: Uncertainty Management in the Supply Chain: Math, Tech, and Wisdom

Dr Juan Marcos Castillo holds a PhD in Industrial Engineering from the University of Texas at Arlington, he is a professor at the Universidad Tecnológica de Panamá (UTP) and directs a Panama & Perspective Analytics, a Think Tank in Logistics, and the Smart Logistics Lab which is attached to the C TASC AIP, a Center of Education, Research, Development and Innovation in Semiconductors. Dr Castillo is a Husband, a Father, a visionary and Christian leader.

12:00 – 12:30, Tuesday, August 4, 2026 - Keynote 6



Mr. Cristian Rincon
Associate Professor and Researcher
UNIMINUTO
Colombia

Presentation Title: Manufacturing in a VUCA World: Evolving from Resilience Recovery to Antifragile Advantage

Cristian Rincón-Guio is an Industrial Engineer and a PhD candidate in Engineering – Industry and Organizations at Universidad Nacional de Colombia. He serves as Associate Professor and researcher at UNIMINUTO, where he leads research projects on resilience in manufacturing. Classified as Senior Researcher by MINCIENCIAS (2025), he has authored over 20 Scopus-indexed publications and delivered more than 15 presentations at international conferences including IEOM, POMS, DSMIE, and ICIEN. His current research focuses on how manufacturing firms build resilience capabilities to adapt to volatile disruptions in VUCA environments.

12:30 – 13:00, Tuesday, August 4, 2026 - Keynote 7



Dr. Miguel Torres Miranda
Director of CITEP, the Center for Innovation in Technology and Electronics of Panama
Panama City, Panama

Presentation Title: Technological Development in Panama: A Perspective from Engineering, Microelectronics, and Innovation

Miguel Torres Miranda holds a BSc in electronic engineering from the Technological University of Panama, an MSc in Microelectronics from the University of Grenoble, France and a PhD in MicroElectronics from the Sorbonne Université in Paris, France. He has worked with different hardware technologies: designing and manufacturing integrated circuits with flexible materials at Ecole Polytechnique in Paris and Joanneum Research in Graz, Austria, and testing novel X-Ray detector chips at CEA Leti in Grenoble, France. He has also developed a career in the technical side of medical devices, designing and testing brain and heart monitors and microfabricating brain-computer interfaces with graphene materials. After several years, he decided to focus on commercializing hardware technologies in different companies and earned an MBA from ESADE Business School. He is currently the director of CITEP, the Center for Innovation in Technology and Electronics of Panama, a new private project fostering technical education for industries and professionals focusing mainly on IoT and edge AI.

Day 2- August 5, 2026 (Wednesday) – InterContinental Hotel

8:30 – 8:40, Wednesday, August 5, 2026 - Welcome Remarks



Prof. Oscar León
Founder, President and Chairman of the Board
Quality Leadership University (QLU), Panama

Oscar León received his Master of Arts in Higher Education Administration in 1989 and his Bachelor of Science in Business Administration in 1988, both from the University of Louisville. He is a Fulbright Scholar and the State Department International Visitor Leadership Program alumni.

León is the President and Founder of Quality Leadership University (QLU), a Panamanian Higher Education Institution he founded in 1997. QLU has offered undergraduate and graduate programs in academic cooperation with University of Louisville since 1999, and both institutions have graduated more than 2,000 Latin American professionals in Panama. Panamanians are the largest nationality of undergraduate students´ population at UofL main campus.

León serves as Secretary of the Board of Directors of the American Chamber of Commerce and Industry of Panama. He served as President of the Private Sector Council for Educational Assistance, an organization composed of more than 30 business associations. He was also a member of the Permanent Multisector Council for the Implementation of the National Commitment to Education.

León is a member of the Board of Directors of the Panamanian Fulbright Association. He was also a member of the National Council for University Evaluation and Accreditation of Panama. León formerly served as President of the Association of Private Universities of Panama and as a Treasurer of the Association of Private Universities of Central America. León is a member of the Lions Club International. León is founding and building the PK-12 Notre Dame Academy of Panama in 2023, institution that will educate more than one thousand students with a STEM focus.

8:40 – 9:20, Wednesday, August 5, 2026 - Keynote 8



Dr. Mariana Leon
Academic Vice President, Researcher, and Professor
Quality Leadership University – University of Louisville Panama
Researcher at Centro de Investigación Educativa (CIEDU), Panama

Mariana holds a Bachelor of Political Science in International Relations from the University of Louisville, a Master of Business Administration from Florida International University, and a Doctor of Education in Entrepreneurial Leadership in Education from Johns Hopkins University. Mariana has more than 15 years of experience managing academic and research programs. As Academic VP she is responsible for the design of academic programs, research, and engagement.

9:20 – 10:00, Wednesday, August 5, 2026 - Keynote 9



Dr. Maria Auxiliadora Cannarozzo Tinoco
Associate Professor in Industrial Engineering
Universidade Federal do Rio Grande do Sul (UFRGS), Brazil

Maria Auxiliadora Cannarozzo Tinoco is an Associate Professor in Industrial Engineering at the Universidade Federal do Rio Grande do Sul (UFRGS), Brazil, where she currently serves as Chair of the Department of Industrial Engineering and Transportation. She holds a Ph.D. and M.Sc. in Industrial Engineering from UFRGS and a Bachelor's degree in Chemical Engineering. Her academic trajectory includes leadership roles in undergraduate program coordination and active engagement in the university's innovation ecosystem.

She is an active researcher affiliated with the Organizational Engineering Research Group (NEO/UFRGS) and the Innovation and Sustainability Center (NIS/UFRGS), leading projects on digital technologies for vocational and training education, as well as new business design based on public data. She currently leads initiatives focused on the modernization of engineering education, supported by CAPES and the Fulbright Commission, involving benchmarking with North American universities. Her research interests include Service Management, Quality Management, Sustainable Product-Service Systems, Innovation, and Engineering Education, with a recent emphasis on the integration of Artificial Intelligence.

10:00 – 10:40, Wednesday, August 5, 2026 - Keynote 10



Dr. Waldemar Karwowski
Pegasus Professor and Chairman
Department of Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

Presentation Title: The Grand Challenges of Industrial and Systems Engineering

Waldemar Karwowski is Pegasus Professor and Chairman, Department of Industrial Engineering and Management Systems, University of Central Florida, USA. He holds an M.S. in Production Engineering and Management from the University of Technology Wroclaw, Poland, and a Ph.D. in Industrial Engineering from Texas Tech University, USA. He was awarded D.Sc. in management science by the Institute for Organization and Management in Industry, Warsaw, and received the National Professorship title from the President of Poland (2012). Three Central European universities also awarded him Doctor Honoris Causa degrees. Dr. Karwowski served on the Board on Human Systems Integration, National Research Council, USA (2007–2011). He currently is Co-Editor-in-Chief of Theoretical Issues in Ergonomics Science journal, Editor-in-Chief of Human-Intelligent Systems Integration journal, and Field Chief Editor of the Frontiers in Neuroergonomics. Dr. Karwowski has over 550 research publications, including over 200 journal papers. He is Fellow of the Ergonomics Society (U.K.), Human Factors and Ergonomics Society (HFES), Institute of Industrial and Systems Engineers (IISE), and the International Ergonomics Association (IEA), and served as President of both HFES (2006-2007) and IEA (2000-2003). He received the William Floyd Award from the Chartered Institute of Ergonomics & Human Factors, the United Kingdom in 2017, and the David F. Baker Distinguished Research Award. Institute of Industrial and Systems Engineers, Atlanta, USA, in 2020. He was elected to Academy of Science, Engineering and Medicine of Florida (ASEMFL), Orlando, Florida, USA, November 2020.

10:40 – 11:00 – Break

11:00 – 11:30, Wednesday, August 5, 2026 - Keynote 11



Dr. Elida de Obaldía
Professor, Universidad Tecnológica de Panamá
Representative of Panama's Advanced Semiconductor Technology Center (C-TASC)

Elida de Obaldía, Professor, Universidad Tecnológica de Panamá, and representative of Panama's Advanced Semiconductor Technology Center (C-TASC). Dr. Elida de Obaldía is an internationally accomplished physicist, senior researcher and academic leader who serves as a central architect in Panama's emerging advanced technology sector. She is a professor and researcher at the Universidad Tecnológica de Panamá affiliated with the Pierre y Marie Curie Laboratory in the School of Science and Technology and a member of Panama's prestigious National Research System. She also serves as Deputy Director for R&D and Talent Development in Panama's Advanced Semiconductor Technology Center, a strategic national initiative designed to integrate the country into the high-potential global microelectronics and semiconductor supply chain. De Obaldía's leadership model bridges the gap between deep scientific research and macroeconomic execution. Her strategic priority at C-TASC centers on fostering active public-private-academic synergies, positioning Panama as a regional nucleus for high-value technological innovation and specialized human capital. Grounded in decades of experience across both corporate laboratories and academic environments, her philosophy emphasizes that national scientific self-reliance is achieved by building robust international research alliances. At UTP, she actively serves as a research liaison, engineering strategic pathways and academic agreements that connect Panamanian students and faculty directly with top-tier research institutions in the United States and globally. Widely recognized as a pioneer in advanced materials science, nanomaterials and solid-state physics, de Obaldía earned her Ph.D. in Applied Physics from Boston University, followed by postdoctoral training at AT&T Bell Labs in Murray Hill, New Jersey. She spent over 15 years in the private semiconductor sector at Texas Instruments in Dallas, Texas, culminating in her role as chief technical officer of product engineering for wireless connectivity, where she managed interdisciplinary engineering teams, optimized time-to-market systems and pioneered RFCMOS technology methodologies. Since returning to Panama, she has built an extensive, highly cited body of research focused on sustainable energy storage, thin-film nanotechnology and biosensors. Her work ranges from developing polycrystalline diamond coatings to improve lithium-ion battery lifetimes, to engineering piezoelectrically actuated microcantilevers for advanced biosensing. Her impeccable reputation as a consensus builder, mentor and rigorous experimentalist makes her a vital asset to international partners looking to navigate or invest in Panama's high-tech and semiconductor roadmap.

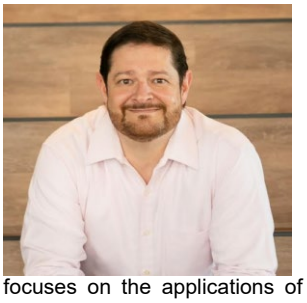
11:30 – 12:00, Wednesday, August 5, 2026 - Keynote 12



Enitza George, MD, MBA, MSAI
Physician Executive, Society of Teachers of Family Medicine (STFM) AI Task Force and Co-Chair, STFM AI Collaborative. Health Systems Program Ambassador
Binghamton University. Binghamton, New York. USA

Dr. Enitza George is a physician executive, board-certified family physician, and health systems leader with more than 30 years of experience in clinical practice, academic medicine, and healthcare transformation. She serves on the Society of Teachers of Family Medicine (STFM) Artificial Intelligence Task Force and is Co-Chair of the STFM AI Collaborative, advancing the responsible integration of AI into medical education and clinical practice. She is also the Health Systems Program Ambassador for the School of Systems Science and Industrial Engineering at Binghamton University. Dr. George holds a Master of Science in Artificial Intelligence in Healthcare and is pursuing a PhD in Industrial and Systems Engineering, where her research focuses on AI governance, systems management, and organizational accountability in healthcare.

12:00 – 12:30, Wednesday, August 5, 2026 - Keynote 13



Fernando Gonzalez Aleu, Ph.D. CPEM
Professor and Researcher, Engineering Department
Universidad de Monterrey (UDEM)
Monterrey, NL, Mexico

Presentation Title: OPERATIONAL EXCELLENCE + SHINGO MODEL

Fernando Gonzalez Aleu is a Professor and Researcher at the Universidad de Monterrey (UDEM) in Mexico. He received a BS in Mechanical and Management Engineering at UDEM, a MS at ITESM in 1999, and both an MS and PhD in Industrial and Systems Engineering from Virginia Tech in 2015 and 2016, respectively. His research focuses on the applications of continuous improvement projects. Prior industry experience includes 15 years implementing quality systems, environmental systems, and management systems. He is member of the Institute of Industrial and Systems Engineers, the American Society for Engineering Management, and the American Society for Quality.

12:30 – 13:00, Wednesday, August 5, 2026 - Keynote 14



Dr. Alfonso Sarmiento
Associate Professor
Industrial Engineering
Faculty of Engineering
University of La Sabana
Chía, Colombia

Presentation Title: From Single-Paradigm to Hybrid Simulation: Methodologies for Integrated Modeling

Dr. Sarmiento is currently a professor and researcher in the Industrial Engineering program at the University of La Sabana. Dr. Sarmiento received his PhD in Industrial Engineering from the University of Central Florida (Orlando, USA) with emphasis in simulation of systems applied to the supply chain. His master's degree was from the University of Florida (Gainesville, USA) with a specialty in Operations Research focused on Logistics. His professional career combines the experience gained over several years as a consultant in industrial engineering (process improvement, production line balance, facility layout, costing, etc.) with teaching in the academic area in courses on quantitative decision-making methods and operations management. His current lines of research include the application of different simulation paradigms (system dynamics, discrete event and agent simulation) and reinforcement learning to model and analyze complex systems.

Day 3- August 6, 2026 (Thursday) – U Latina Learning Villa

8:45 – 8:55, Wednesday, August 5, 2026 – Welcome Address from UTP



Dr. Ángela Laguna Caicedo
President
Technological University of Panama (UTP)

Dr. Ángela Laguna Caicedo is the President of the Technological University of Panama (UTP) and one of the country's most respected academic leaders. A distinguished civil engineer, educator, and administrator with more than four decades of service, she has devoted her professional life to strengthening engineering education, advancing environmental sustainability, and fostering institutional excellence. Throughout her remarkable career, she has served in numerous leadership positions at UTP, including Academic Coordinator, Director of the Experimental Engineering Center, Dean of the Faculty of Civil Engineering, Vice Rector for Academic Affairs, and now President. She has also made significant contributions to public policy through her work with Panama's Ministry of Health and has been recognized nationally and internationally for her leadership in engineering, higher education, and professional organizations.

Few individuals have shaped the history of the Technological University of Panama as profoundly as Dr. Laguna. Early in her career, she had the privilege of serving as an assistant to Dr. Víctor Levi Sasso, the visionary founder of UTP, an experience that profoundly influenced her lifelong commitment to the institution's mission. Inspired by his vision, she has become one of the principal architects of the university's continued growth

and modernization. As a visionary leader, Dr. Laguna has championed the development of the Observatories Initiative, transforming UTP into much more than an institution of higher learning. Under her leadership, the University has strengthened its role as an "antenna" for emerging technologies, anticipating global trends while connecting academia, industry, and government. These observatories position UTP not only as a center of education and research but also as a catalyst for innovation, strategic intelligence, and national development, helping drive the Republic of Panama toward a more competitive, sustainable, and knowledge-based future. Her leadership is characterized by wisdom, humility, and an unwavering belief that universities must not simply respond to change—they must help create it.

8:55 am – 9:10 am: **A conversation about the Quality Institute. Their organization, projects, and success in Peru.**



Dr. José Carlos Flores Molina
Director, Quality Institute
Pontificia Universidad Católica del Perú (PUCP), Peru

Dr. José Carlos Flores Molina is the Director of the Quality Institute at the Pontificia Universidad Católica del Perú (PUCP) and a Full Professor in the Department of Industrial Engineering. He is an internationally recognized expert in quality management, Lean Six Sigma, operational excellence, continuous improvement, and organizational performance.

Dr. Flores earned his Ph.D. in Industrial and Systems Engineering from Florida International University, USA, and his Master of Science in Quality Engineering from the University of Newcastle upon Tyne, United Kingdom. He also holds Lean Six Sigma Master Black Belt certification from TMAC at The University of Texas at Arlington, USA, and is an ISO 9000 Lead Auditor certified by the British Standards Institution (BSI), UK. He received his Industrial Engineering degree from the Pontificia Universidad Católica del Perú.

As Director of the Quality Institute at PUCP, Dr. Flores leads academic, research, executive education, consulting, and outreach initiatives that promote quality management, operational excellence, innovation, and organizational competitiveness throughout Peru and Latin America. Under his leadership, the Institute has become a leading center for professional education, applied research, and industry collaboration, supporting organizations in both the public and private sectors through quality improvement, Lean Six Sigma implementation, process optimization, and organizational transformation.

Dr. Flores has held numerous national and international leadership positions. He currently serves as President of the National Society of Accredited Organizations in Quality Systems (SNOASC) and previously served as President of the Permanent Standardization Committee of Peru's National Institute for Quality (INACAL) under the Ministry of Production from 2016 to 2019. Internationally, he served as Regional Director for Latin America and the Caribbean of the American Society for Quality (ASQ), where he promoted quality initiatives and professional development across the region. In recognition of his outstanding contributions to the quality profession, he was elected an ASQ Fellow, one of the organization's highest professional honors.

Throughout his distinguished career, Dr. Flores has advised numerous organizations in implementing Lean Six Sigma, quality management systems, operational excellence, and continuous improvement methodologies. His work has significantly contributed to enhancing productivity, quality, and competitiveness across manufacturing, service, healthcare, education, and government organizations.

At the IEOM Conference, Dr. Flores Molina will participate in a featured conversation on the Quality Institute at PUCP, highlighting its mission, organizational structure, major projects, industry partnerships, research initiatives, and its contributions to advancing quality, operational excellence, and industrial competitiveness in Peru and throughout Latin America.

9:10 am – 9:50 am: Keynote 15



Dr. Luis Rabelo
Professor, Department of Industrial Engineering & Management Systems
University of Central Florida, Orlando, FL, USA

Dr. Luis Rabelo received the BS in Electro-Mechanical Engineer from the Technological University of Panama in 1983, an MS in Electrical Engineering from the Florida Institute of Technology in 1987 Master's and Doctorate in Engineering Management from the University of Missouri. He was a Postdoc at the University of Missouri in Nuclear Engineering. Dr. Rabelo received a dual MS in Systems and Management from the Massachusetts Institute of Technology. He has worked for the Advanced Technology Group (Goodrich) and Honeywell Laboratories. Dr. Rabelo was a NASA Fellow from 2002 to 2005, and a Project Manager at NASA from 2009 to 2011. He is currently Professor in the Industrial Engineering and Management Systems Department at UCF. He is also the Undergraduate Coordinator. He has written more than 300 articles and a book in Artificial Intelligence. He has been the principal advisor for 39 Master's students and 29 PhDs. He received the award for the Best Scientific Article of the Year 2004 from the Society of Automotive Engineers, received the distinction "ONE NASA" in 2006. He was the recipient of the Fulbright Distinction in 2008. In November 2008, he received the honor of the Technological University of Panama (UTP) of being the 2008 Distinguished Alumni. In 2011, he was the Henaac Award Winner in Education. In 2013 and 2018, he received the Forest R. McFarland Award from the Society of Automotive Engineering (SAE). Lately, he received the SAE Russell S. Springer Award for his article on the modeling of space operations systems in 2017.

9:50 am – 10:25 am: Keynote 16



Dr. Lindsay Alvarez-Pomar
Associate Professor of Industrial Engineering
Universidad Distrital Francisco José de Caldas
Bogotá, Colombia

Dr. Lindsay Álvarez-Pomar is an Associate Professor of Industrial Engineering at Universidad Distrital Francisco José de Caldas in Bogotá, Colombia, where she is also an active researcher. She holds a Ph.D. in Engineering with an emphasis on Information and Knowledge Science, a Master's degree in Industrial Engineering, and a Bachelor's degree in Industrial Engineering.

Dr. Álvarez-Pomar's research focuses on collective intelligence, urban mobility, simulation, knowledge management, and production management. Throughout her academic career, she has contributed to the development of interdisciplinary research addressing complex socio-technical systems and organizational challenges.

She is the co-founder and researcher of the SES (Business and Social Systems) Research Group at Universidad Distrital Francisco José de Caldas, where she leads and collaborates on research projects aimed at advancing knowledge in industrial engineering and systems thinking. Her work has been presented at national and international conferences and has contributed to the academic discussion on innovation, organizational learning, and sustainable development.

10:25 am – 11:00 am: Keynotes 17 & 18



Dr. Charles W. Davis, Jr.
Associate Professor of Engineering
Embry-Riddle Aeronautical University Daytona Beach

Charles W. Davis, Jr. is an Associate Professor of Engineering at Embry-Riddle Aeronautical University and a recognized leader in engineering education, leadership development, and systems engineering. He holds B.S., M.S., and Ph.D. degrees from the University of Central Florida and brings more than 25 years of industry experience and over 20 years in higher education.

Dr. Davis is a Past President and Fellow of the Florida Engineering Society (FES) and has received numerous recognitions for his contributions to engineering education and professional leadership, including the 2025 Florida Engineering Society Engineering Faculty Member of the Year Award. His research focuses on leadership, systems engineering, virtual reality, digital twins, quality engineering, and engineering education, and he is the author of A Systematic Guide to Leadership Selection Using Total Quality.



Edgar Gutierrez-Franco, PhD
Associate Professor
Externado University of Colombia

Edgar Gutierrez-Franco, PhD, is an associate professor at the Externado University of Colombia and an Affiliated Researcher at the Massachusetts Institute of Technology. He is a supply chain management analyst with experience leading and developing data-driven strategies and models for corporate organizations. His focus is on the creation of optimization and simulation models, machine learning algorithms, and strategic management methodologies to drive efficient and sustainable operations in the supply chain and omnichannel channels, thereby supporting managerial decision-making processes.

He has experience in various aspects of the supply chain, including network design, last-mile logistics, capacity planning, inventory control and allocation, omnichannel sales strategies, and digital supply chain models. He has held leadership roles in cross-functional corporate teams, ensuring the successful delivery of projects within established deadlines and budgets. His communication skills and strong stakeholder relationships have allowed him to manage large-scale projects while fostering a collaborative work environment.

His work experience spans several industries, including retail, beverage, agribusiness, and consulting. In academia, he has advised projects and led courses related to Systems Engineering, Operations Research, Simulation, Machine Learning, and Supply Chain Management in the United States and Latin America since 2003. He is also the author and editor of books in the field of Supply Chain Analytics, including "Engineering Analytics: Advances in Research and Applications" (Taylor and Francis, 2021) and "Artificial Intelligence: Advances in Research and Applications" (Nova, 2018).

11:00 am – 11:50 am: Conversation

Leadership at the Highest Level:
A conversation with two of Latin America's most influential CEOs

Pedro Heilbron
CEO
Copa Airlines
Panama

Jorge Salas
CEO
Bladex - Banco Latinoamericano de Comercio Exterior (Foreign Trade Bank of Latin America)
Panama

Submissions Received from Countries and Territories

1. Argentina
2. Australia
3. Bangladesh
4. Bolivia
5. Brazil
6. Canada
7. Chile
8. Colombia
9. Ecuador
10. France
11. Greece
12. India
13. Indonesia
14. Italy
15. Kazakhstan
16. Mexico
17. Norway
18. Oman
19. Pakistan
20. Panama
21. Paraguay
22. Peru
23. Philippines
24. Saudi Arabia
25. South Africa
26. Spain
27. Thailand
28. Trinidad and Tobago
29. United Kingdom
30. United States

University Partners

1. ULatina
2. QLU
3. UTM
4. University of Panama
5. UCF
6. University of Derby, UK
7. Universite De Lorraine, Nancy cedex – France
8. BESTIU – Bharatiya Engineering Science Technology Innovation University, Gownivaripaill, Gorantla, AP, India
1. BIM – Bangladesh Institute of Management
2. Binghamton University, The State University of New York (SUNY), USA
3. Eastern Michigan University, Ypsilanti, Michigan, USA
4. Florida Polytechnic University, USA
5. Lawrence Technological University, Southfield, Michigan, USA
6. Prince Sultan University, Riyadh, Saudi Arabia
7. Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia
8. University of Monterrey (UDEM), Mexico
9. University of New Brunswick at Fredericton, Canada
10. University of the District of Columbia, Washington, DC, USA
11. Wayne State University, Detroit, Michigan, USA

Corporate Partners

1. Airbus
2. Amatrol Inc.
3. aThingz
4. Daikin Applied
5. Eaton
6. Ford Motor Company
7. FUTEK
8. Hexaly
9. SIEMENS
10. Tooling Tech Group

Panels

August 4, 2026: 2:00 – 3:20 pm

Panel 1: Women Leaders in STEM

A discussion among distinguished leaders on advancing women's participation and leadership in STEM education, while addressing emerging challenges and opportunities for future generations.

Moderator:



Dr. Marcela Paredes de Vásquez
Professor, Universidad Tecnológica de Panamá (UTP) (Panamá)

Dr. Marcela Paredes de Vásquez is a distinguished educator, engineer, and public servant with extensive experience in higher education leadership, public policy, and international cooperation. She holds a Master of Science in Electric Power Engineering from Rensselaer Polytechnic Institute (USA) as a Fulbright Scholar and a Bachelor of Science in Electromechanical Engineering from the Technological University of Panama (UTP). Dr. Paredes served as Minister of Education of Panama (2014–2018), President of the Technological University of Panama (2008–2013), and Ambassador of Panama to Chile (2018–2019). She is currently a Full Professor of Electric Power Engineering at UTP and serves as an Independent Director of Polaris Renewable Energy Inc., where she chairs the Human Resources and Environmental, Social, and Governance (ESG) Committee. Her international leadership includes serving as Chair of the Inter-American Committee on Education of the Organization of American States (OAS) and as a member of the Board of UNESCO's International Institute for Higher Education in Latin America and the Caribbean (IESALC). She is also a founding member of the Network of Women Leaders in Higher Education in Latin America (EMULIES).Dr. Paredes has received numerous recognitions for her contributions to education and public service, including the National Order Belisario Porras of Panama and an Honorary Doctorate from Wilkes University in the United States.

Members:

Ing/Mgt Melanie Castillo, Coordinator of Graduate Programs, Quality Leadership University (Panamá)
Dr. Mónica Aurora Puertas, Associate Director, Instituto para la Calidad, Pontificia Universidad Católica del Perú (Perú)
Ing/Mgt Eyda Ramos, President, Universidad Interamericana de Panamá (Panamá)
Dr. Alice Smith, US National Academy of Engineering Member, Auburn University (USA)
Ing. Andria Villarreal, Presidenta de la Asociación Panameña de Ingenieros Industriales y Afines (Panama)



Ing/Mgt Melanie Castillo
Coordinator of Graduate Programs
Quality Leadership University (Panamá)

Melanie Castillo de Morales is a recognized expert in Business Agility, Lean Agile transformation, innovation, and project management, with more than 17 years of experience leading strategic initiatives across technology, banking, maritime and port operations, telecommunications, aviation, retail, construction, and other industries. She is the Founder of MelCas, PMOLead, and Conecta-T, where she advises organizations on organizational transformation, innovation, agile project management, and high-performance teams. Ing. Castillo serves as Professor and Academic Advisor at Quality Leadership University, teaching graduate programs in project management and innovation. She holds master's degrees in Project Management and Higher Education, is an engineer in Telecommunications, and is certified as a Project Management Professional (PMP®), PMI Agile Certified Practitioner (PMI-ACP®), Certified ScrumMaster (CSM), and ICAgile Certified Coach (ICP-ACC). She is an internationally recognized speaker and facilitator on business agility, digital transformation, Design Thinking, and innovation leadership.



Dr. Mónica Aurora Puertas
Associate Director
Instituto para la Calidad, Pontificia Universidad Católica del Perú (Perú)

Mónica Puertas is Associate Director of Content and Strategic Development and Academic Director at the Institute for Quality of the Pontificia Universidad Católica del Perú (PUCP), where she is also a Professor of Industrial Engineering. She holds a Ph.D. in Healthcare Engineering from the University of South Florida and an M.S. in Industrial Engineering from the University of Puerto Rico–Mayagüez. With more than 24 years of experience in teaching, research, consulting, and auditing, Dr. Puertas is internationally recognized for her expertise in quality management systems, continuous improvement, operations research, healthcare process optimization, and ISO standards. She is a certified Lead Auditor, a former Chair of the American Society for Quality (ASQ) Lima Section, and has advised numerous organizations in quality, organizational excellence, and management systems throughout Latin America.



Ing/Mgt Eyda Ramos
President
Universidad Interamericana de Panamá (Panamá)

Eida Ramos is President of the Universidad Interamericana de Panamá (UIP) and an experienced higher education leader with more than 25 years of service in education. She is a strong advocate for educational innovation and believes that the integration of technology and education is essential to delivering high-quality learning experiences that prepare students for the future. Ing. Ramos holds master's degrees in Educational Management, with an emphasis on Critical and Creative Thinking, and in Systems Management with an emphasis on Information Security. Throughout her career, she has promoted academic excellence, innovation, digital transformation, and student-centered education, contributing significantly to the advancement of higher education in Panama.



Dr. Alice Smith
US National Academy of Engineering Member
Endowed Shelby Distinguished Professor of the Departments of Mechanical Engineering and Computer Science, University of Alabama (USA)

Alice Smith is Endowed Shelby Distinguished Professor of the Departments of Mechanical Engineering and Computer Science at the University of Alabama. Prior to that, she was the Joe W. Forehand, Jr. Distinguished Professor of the Industrial and Systems Engineering Department at Auburn University, where she served as Department Chair from 1999-2011. She also had a joint appointment with the Department of Computer Science and Software Engineering. Previously, she was on the faculty of the Department of Industrial Engineering at the University of Pittsburgh from 1991-99, which she joined after industrial experience with Southwestern Bell Corporation. Dr. Smith has degrees from Rice University (BSCE), Saint Louis University (MBA), and Missouri University of Science and Technology (PhD) along with a recent BA in Spanish from Auburn University.

Dr. Smith's research focus is analysis, modeling, and optimization of complex systems with emphasis on intelligent computation inspired by natural systems integrated with traditional operations research and statistical approaches. She holds one U.S. patent and several international patents and has authored publications which have garnered over 19,000 citations, an H Index of 54, and an i10 Index of 139 (Google Scholar). Dr. Smith is in the top half of the List of Top 2% of Scientific Researchers worldwide recently compiled by Stanford University based on publishing impact. Her books include Women in Computational Intelligence: Key Advances and Perspectives on Emerging Topics and Women in Industrial and Systems Engineering: Key Advances and Perspectives on Emerging Topics, both published by Springer. Several of her papers are among the most highly cited in their respective journals including the most cited paper of Reliability Engineering & System Safety, the 7th most cited paper of IEEE Transactions on Reliability, and the most cited paper of The Engineering Economist. She won the E. L. Grant Best Paper Awards in 1999 and in 2006, and the William A. J. Golomski Best Paper Award in 2002. Dr. Smith is the outgoing Editor in Chief of INFORMS Journal on Computing and an Area Editor of Computers & Operations Research.

Dr. Smith has been a principal investigator on over $12 million of sponsored research with funding by Department of Homeland Security, NASA, U.S. Department of Defense, Missile Defense Agency, National Security Agency, NIST, U.S. Department of Transportation, Frontier Technologies Inc., Lockheed Martin, Adtranz (now Bombardier Transportation), the Ben Franklin Technology Center of Western Pennsylvania, and U.S. National Science Foundation, from which she has been awarded 18 distinct grants including a CAREER grant and an ADVANCE Leadership grant. Her industrial partners on sponsored research projects have included DaimlerChrysler Electronics, Toyota, Eljer, Frontier Technology Inc., Extrude Hone, Ford Motor, and Crucible Compaction Metals. International research collaborations have been sponsored by Germany, Mexico, Japan, Turkey, United Kingdom, The Netherlands, Egypt, South Korea, Iraq, China, Colombia, Chile, Algeria, and the U.S., and by the Institute of International Education. She is a four-time Fulbright Scholar (2013, 2016, 2017, 2020) with residencies in Turkey, Chile, and Colombia.

For accomplishments in research, education, and service she was named Endowed Shelby Distinguished Professor in 2026 at University of Alabama. Previously she was the Joe W. Forehand, Jr. Distinguished Professor, the Joe W. Forehand / Accenture Distinguished Professor, the H. Allen and Martha Reed Professor, and the Philpott WestPoint Stevens Professor, all at Auburn University. Dr. Smith was named a 2020 Yellowhammer Women of Impact (20 women are honored each year in the State of Alabama https://alabamawomen.org/#2020). In 2017, she received the inaugural Auburn University 100 Women Strong Leadership in Diversity Faculty Award. Dr. Smith was awarded the Wellington Award in 2016, the IIE Albert G. Holzman Distinguished Educator Award in 2012, and the INFORMS WORMS Award for the Advancement of Women in OR/MS in 2009. Dr. Smith received the Senior Research Award of the College of Engineering at Auburn University in 2001 and the University of Pittsburgh School of Engineering Board of Visitors Faculty Award for Research and Scholarly Activity in 1996.

Dr. Smith is a member of the National Academy of Engineering (NAE), a Life Fellow of the Institute of Electrical and Electronics Engineers (IEEE), a Fellow of the Institute for Operations Research and Management Science (INFORMS), a Fellow of the Institute of Industrial and Systems Engineers (IISE), a senior member of the Society of Women Engineers, a member of Tau Beta Pi, and a Registered Professional Engineer. She has served as IEEE Distinguished Lecturer and INFORMS Official Speaker and has given frequent keynote/plenary talks at international conferences. She served as Chair of the Council of Industrial Engineering Academic Department Heads and as President of the INFORMS Association of Chairs of Operations Research Departments. She was selected as an INFORMS Diversity, Equity, and Inclusion Ambassador in 2021. Her leadership roles in conferences sponsored by INFORMS and IEEE have been numerous.



Ing. Andria Villarreal
Presidenta de la Asociación Panameña de Ingenieros Industriales y Afines (Panama)

Andria Villarreal is an Industrial Engineer and innovation leader with extensive experience in project portfolio management, business strategy, and organizational transformation. She currently serves as PMO Innovation Manager for Panama at Estrella Azul, where she leads a portfolio of more than 40 innovation projects, driving strategic growth, operational excellence, and cross-functional collaboration. In addition to her corporate leadership, Ing. Villarreal serves on the Board of Directors of the Panamanian Association of Industrial Engineers (APII), promoting innovation, engineering leadership, and professional development throughout Panama. Throughout her career, she has held leadership positions in manufacturing, marketing, banking, and process improvement, and is recognized for her expertise in innovation management, strategic execution, and continuous improvement.

August 4, 2026: 3:30 – 4:50 pm

Panel 2: Logistics and Ports

A panel examining the future of ports, logistics, transportation systems, and supply chains, with a focus on competitiveness, resilience, digital transformation, and economic development.

Co-Moderator: Dr. Maximiliano Jiménez, Consultant and Professor, Quality Leadership University (Panamá)



Dr. Maximiliano Jiménez is an internationally recognized consultant, educator, and executive leader with extensive experience in quality management, organizational excellence, logistics, international business, and higher education. He is the President of MJ Consulting Inc. and has advised organizations throughout Latin America in areas related to strategic planning, operational excellence, leadership development, quality systems, and organizational transformation.

Dr. Jiménez pursued graduate studies at Pennsylvania State University and has dedicated much of his professional career to strengthening collaboration among academia, industry, and government. He has played an important role in promoting quality, innovation, and professional development initiatives throughout the region.

A strong advocate for international education and leadership development, Dr. Jiménez serves as an Ambassador of the Industrial Engineering and Operations Management (IEOM) Society in Panama and is actively involved in advancing engineering, management, and technology education across Latin America. His professional interests include logistics, ports, supply chain management, quality systems, organizational leadership, and sustainable economic development.



Co-Moderator: Dr. Mansooreh Mollaghasemi, Director of IE Graduate Programs, University of Central Florida (USA)

Dr. Mansooreh Mollaghasemi is an Associate Professor in the Department of Industrial Engineering and Management Systems at the University of Central Florida (UCF). She earned her Ph.D. in Industrial Engineering from the University of Louisville and has more than three decades of experience in teaching, research, and academic leadership.

Dr. Mollaghasemi is internationally recognized for her contributions to simulation modeling and analysis, operations research, supply chain systems, decision support, and optimization. Throughout her career, she has led and participated in numerous research projects sponsored by organizations including NASA, the National Science Foundation (NSF), the U.S. Department of Transportation, Orlando International Airport, Lucent Technologies, and the U.S. Army. Her work has addressed topics such as logistics systems, emergency evacuation planning, airport operations, supply chain modeling, space operations, and simulation-based decision making.

She is the recipient of numerous honors, including the UCF College of Engineering Distinguished Researcher Award, multiple Researcher of the Year awards, and the State of Florida Teaching Incentive Program Award. Dr. Mollaghasemi has published extensively in leading journals and conferences and has supervised numerous master's and doctoral students who have gone on to successful careers in academia, industry, and government.

Members

- Dr. Jorge Barnett Lawton, Director of Georgia Tech Panama Logistics Innovation & Research Center (Panama)
- Dr. Zoila Castillo, Profesora de la Universidad Tecnologica de Panama (Panama)
- Ing/MBA Hernando Garzon Saenz, Docente en Fundación Universitaria Tecnológico Comfenalco Cartagena (Colombia)
- Dr. Edgar Gutierrez, Director Data Analytics Center, Externado University/University of Central Florida (Colombia, USA)
- Eduardo Tapiero, Economic Advisor – National Planning Institute for Development of Panama (Panama)
- Dr. Ricardo Ungo, Director of the Maritime, Ports and Logistics Management Institute, Old Dominion University (USA)
- Dr. Ying Xie, Director of Logistics Cluster, University of Central Florida (USA)



Dr. Jorge Barnett Lawton
Director of Georgia Tech Panama Logistics Innovation & Research Center (Panama)

Jorge Barnett Lawton is Managing Director of the Georgia Tech Panama Logistics Innovation & Research Center, a joint initiative of the Government of Panama and Georgia Institute of Technology. From that role he leads local and regional projects related to the advancement of logistics and transport, digital transformation, logistics cluster performance, supply chain and distribution network design, and process innovation. He earned a bachelor's degree in industrial engineering from the Technological University of Panama; a masters in industrial engineering from the Georgia Institute of Technology in Atlanta, USA; and a masters and Ph.D. in logistics and supply chain management from the MIT-Zaragoza International Logistics Program in Zaragoza, Spain. Over two decades he has developed his experience in the private and academic sectors in Panama, Spain, Mexico and Argentina, occupying various roles in the fields of manufacturing, project management, technology, logistics, research and teaching. Every day he's thankful for his beloved wife and daughter, and the opportunity to work for the development of his country with the support of a talented and unrivaled team of professionals.

Dr. Zoila Castillo, Profesora de la Universidad Tecnologica de Panama (Panama)



Zoila Yadira Guerra de Castillo holds a Ph.D. in Industrial Engineering from Iowa State University (2006) and is a Full Professor and Research Leader at CIILCA at the Technological University of Panama. Her research focuses on supply chains and logistics, stochastic models and simulation, port, canal, and airport systems, and operational uncertainty. She served as National Director of Research at the Technological University of Panama (UTP) (2022–2023) and Director of Knowledge Management and Transfer (2014–2018), a period during which 167 PCT applications ranked Panama first in Latin America per million inhabitants. She coordinated the Ibero-American CYTED-CECIAC network (8 countries, 10 institutions) and served as a visiting professor at the MIT Center for Transportation & Logistics as a Fulbright scholar. She has provided consulting services to ECLAC on the distribution of COVID-19 vaccines in Central America and to the IDB on the PNLog and Panama's National Logistics Strategy. Her work is funded by CYTED, SENACYT, and the German government; she has filed three PCT patent applications and has been published in journals such as the Journal of the Operational Research Society and the International Journal of Disaster Risk Reduction. She was recognized as one of the 24 Pioneers of Science in Panama.



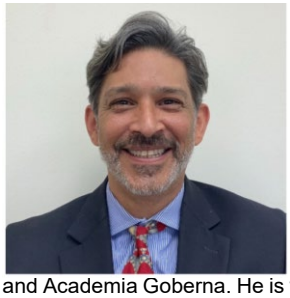
Ing/MBA Hernando Garzon Saenz
Docente en Fundación Universitaria Tecnológico Comfenalco Cartagena (Colombia)

Hernando Garzón Saenz is a professor and industrial engineering educator at Fundación Universitaria Tecnológico Comfenalco Cartagena, where he coordinates classroom-based research projects and teaches courses in operations management, production systems, and plant design. He has more than 20 years of combined experience in academia and industry, with expertise in production planning, quality management, process improvement, and industrial operations. Prior to his academic career, Ing/MBA Garzón held production leadership positions at POSTOBON S.A. and other manufacturing organizations, gaining extensive experience in production planning and control, statistical process control, quality systems, inventory management, and continuous improvement. He holds an MBA with a specialization in Integrated Quality, Safety, and Environmental Management Systems, as well as a specialization in Production and Quality Management, and is actively engaged in applied research in operations and logistics.



Dr. Edgar Gutierrez-Franco
Director Data Analytics Center, Externado University/University of Central Florida (Colombia, USA)

Edgar Gutiérrez-Franco is Director of the Center for Applied Analytics and Technology and Director of the Master's Program in Digital Transformation and Business Analytics at Universidad Externado de Colombia and a Lecturer at the University of Central Florida. He also serves as President of the Latin American and Caribbean Chapter of the Production and Operations Management Society (POMS-LAC) and is a Research Affiliate at the MIT Center for Transportation and Logistics (MIT-CTL). Dr. Gutiérrez-Franco earned his Ph.D. in Industrial Engineering from the University of Central Florida and completed postdoctoral research at MIT. His expertise includes supply chain analytics, operations research, artificial intelligence, machine learning, optimization, simulation, and digital transformation. His research and industry collaborations focus on applying advanced analytics to improve logistics, retail, manufacturing, agribusiness, and sustainable supply chain systems throughout Latin America and beyond.



Eduardo Tapiero, Economic Advisor – National Planning Institute for Development of Panama (Panama)

Eddie Tapiero is an economist and international strategic advisor specializing in international trade, logistics, maritime economics, economic policy, and competitive intelligence. He currently serves as Economic Advisor to the National Planning Institute for Development of Panama within the Ministry of Economy and Finance and as a Competitive Intelligence Specialist at the Panama Canal Authority. Throughout his career, he has advised the Presidency of Panama, the Ministry of Commerce, and national institutions on logistics strategy, ports, international trade, economic competitiveness, and public policy. Mr. Tapiero holds a Master's degree in Economics from Northeastern University and a Bachelor's degree in Economics from the University of Pittsburgh. He has further specialized in international geopolitics, maritime economics, intelligence and counterintelligence, and LNG maritime business through executive programs at the École de Guerre Économique (France), Lloyd's Maritime Academy, and Academia Goberna. He is widely recognized for his expertise in economic forecasting, maritime strategy, business intelligence, and the evolving relationship among geopolitics, global trade, logistics, and supply chains.



Dr. Ricardo Ungo
Director of the Maritime, Ports and Logistics Management Institute
Old Dominion University (USA)

Ricardo Ungo is a professional with 24+ years of experience in the manufacturing and maritime industry. He worked for more than a decade at the Panama Canal, participating in the Panama Canal Expansion project studies and leading the development of studies for maritime related projects as Business Development Manager. Prior to this, Dr. Ungo worked with Melo Industrial Group managing industrial capacity expansion projects as Production and Sales Manager. Dr. Ungo is now Director of the Maritime, Ports and Logistics Management Institute and Clinical Assistant Professor in the School of Supply Chain, Logistics and Maritime Operations at Old Dominion University. He specializes in the topics related to the maritime industry and global supply chains. He holds a Ph.D. in Economics from Vanderbilt University.



Dr. Ying Xie
Director of Logistics Cluster
University of Central Florida (USA)

Ying Xie is currently the Director of the Logistics Cluster at the University of Central Florida. She was a Professor of Supply Chain Analytics at Cranfield University, United Kingdom. She is an internationally recognized leader in supply chain management, operations research, machine learning, big data analytics, and intelligent decision-support systems. She has held numerous senior academic leadership positions, including Director of the Centre for Intelligent Supply Chain and Head of School at Anglia Ruskin University, where she led strategic initiatives in research, education, and international partnerships. A Principal Fellow of Advance HE, Prof. Xie has successfully led and managed research and innovation projects funded by UK Research and Innovation (UKRI), Innovate UK, the European Union, and major industry partners. Her research focuses on digital supply chains, sustainable aviation, logistics, maritime systems, artificial intelligence, and supply chain resilience. She serves on several national strategic advisory boards and is widely recognized for fostering collaboration among academia, industry, and government to develop innovative, data-driven solutions that enhance global supply chain performance and sustainability. Dr. Xie earned her Ph.D. in Supply Chain and Operational Research from Coventry University, United Kingdom, and a Master of Science with Distinction in Intelligence Engineering from the University of Liverpool, specializing in Artificial Intelligence, Control Theory, and Fuzzy Systems.

August 5, 2026 – 2:00 – 3:20 pm

Panel 3: AI in the Curriculum

An exploration of how universities can integrate Artificial Intelligence into academic programs to better prepare graduates for the rapidly evolving needs of industry, government, and society.



Co-Moderator: Yaravi Cardoze, Past President of PMI Panama

Yaravi specializes in empowering Boards of Directors, business owners, and CEOs to lead strategic transformations and make critical decisions that drive sustainable growth. She provides high-level perspectives and actionable solutions to optimize corporate governance, expand into new markets, and manage risks for organizations operating across the United States, Latin America, Europe, and Brazil. Her focus is on unlocking organizations' strategic potential and guiding leaders toward long-term success. Additionally, she supports organizations in accelerating their organizational, digital, and artificial intelligence transformation journeys. She holds a Bachelor's degree in Computer Science, an MBA, and a Project Management Professional (PMP) certification. She has also completed executive specializations in: Organizational Transformation – University of California, Berkeley, Haas School of Business, Digital Transformation and Industry 4.0 – University of Virginia and AI and the Future of Work and Organizations – Lund University, Sweden and Boards of Directors within the Governance Process – University at Buffalo, New York.

Her professional career includes leading transformation teams across Latin America and globally in Fortune 500 companies, startups, non-governmental organizations (NGOs), and other organizations. In these leadership roles, she orchestrated strategies and programs focused on cultural transformation, organizational capability disruption, the creation of new business lines, and market expansion. She has also led digital and workforce transformation programs focused on digitalization, automation, artificial intelligence, big data, machine learning, citizen development, and related technologies. As Chief Digital Officer (CDO) of the Panama Canal, she designed and executed the organization's digital and business transformation roadmap. In 2023, she was recognized as Chief Digital Officer of the Year in Latin America and was named one of the Top 50 Most Influential HR Leaders 2025 for her exceptional ability to inspire, connect, and transform organizations.

Yaravi has been an active member of the Project Management Institute (PMI) for more than 15 years. She served as President of the PMI Panama Chapter (2016–2018) and graduated from the PMI Global Master Class. She was PMI's Regional Mentor for Latin America (2021–2024), a candidate for the PMI Board of Directors (2024–2026), and currently serves as a PMI Ambassador and member of the Global Culture and Inclusion Committee. She is the founder of several professional communities, including Agiles Panamá, Women in Agile, Data Science Community, and Heart of Agile Panamá. She also serves as a judge for the PMO (Project, Program, and Portfolio Management Office) Global Awards.

She was recognized as one of the Most Inspiring Women in 2017 and received recognition from the Worldwide Women Association in 2022 for her outstanding professional achievements. She also volunteered as an advisor to the Project Management Office of the Archdiocese of Panama during the planning and execution of World Youth Day (JMJ) Panama 2019. Yaravi has delivered keynote speeches at conferences and events in Brazil, Hong Kong, Kenya, Bangladesh, Uganda, the United Arab Emirates, Mexico, Peru, Argentina, the Dominican Republic, Spain, Canada, the United States, Pakistan, Ghana, Taiwan, South Korea, and India. She is also the co-author of the bestselling book Women's Leadership in Latin America.

Co-Moderator: Ing/MBA Galileo Solís, Science and Technology Lead Specialist at the Inter-American Development Bank (IDB) (Panamá)



Galileo Solís is a Lead Specialist in the Competitiveness, Technology, and Innovation Division of the Inter-American Development Bank (IDB). He has more than 25 years of experience in science, technology, and innovation public policy, having worked across the public sector, private sector, and non-profit organizations.
At the IDB, he works closely with decision-makers throughout Central America in the design, implementation, and evaluation of projects aimed at strengthening innovation, productivity, and competitiveness capabilities. Prior to joining the Bank, he served at Panama's National Secretariat for Science, Technology, and Innovation (SENACYT).

Galileo Solís holds a Bachelor's degree in Systems Engineering from Universidad Católica Santa María la Antigua (USMA), an MBA in Banking and Finance from INCAE Business School, and a Master's degree in Project Formulation and Evaluation from Universidad del Istmo. He is also a certified Project Management Professional (PMP) by the Project Management Institute (PMI).

Members

- Dr. Cristian Barria, Universidad Mayor (Chile)
- Dr. Hector Flores, Universidad Distrital, Colombia

- Dr. Alfonso Sarmiento, Chair IE & Civil Engineering, Universidad de La Sabana (Colombia)
- Dr. Javier Sanchez-Galan, Professor of Systems Engineering, Universidad Tecnologica de Panama, (Panama)



Dr. Cristian Barría, Director of the Master's Program in Information Security Engineering at Universidad Mayor and cybersecurity researcher (Chile)

Cristian Barría serves as Director of the Master's Program in Information Security Engineering at Universidad Mayor, where he leads graduate education and research in cybersecurity, cyber resilience, and digital risk management. His career combines academic leadership with extensive experience in information security and digital transformation.

He holds a Ph.D. in Computer Engineering from the Pontifical Catholic University of Valparaíso, along with master's degrees in Computer Engineering and Educational Planning and Management. Founder of the SEGDATA Conference, Dr. Barría is an active researcher, author, and international speaker whose work focuses on cybersecurity, cyber defense, and information security education.



Dr. Hector Flores
Professor and Researcher
Universidad Distrital Francisco José de Caldas

Héctor Flórez Dr. Héctor Flórez is a Professor and Researcher at Universidad Distrital Francisco José de Caldas, where he leads research initiatives in artificial intelligence, intelligent systems, and applied informatics. He also serves as Editor of the university's Revista Científica, promoting interdisciplinary research and international academic collaboration.

His research focuses on artificial intelligence, machine learning, bio-inspired computing, data science, and intelligent decision-support systems. Dr. Flórez has authored numerous scientific publications, edited international conference proceedings, and contributes to the advancement of AI through research, education, and innovation.

Dr. Tony Prensa
CEO of TP Global Business Consulting LLC
Director for Central America and the Caribbean for the IEOM Society (Republica Dominicana, Puerto Rico, USA)



Tony Prensa is an internationally recognized expert in strategic Project Management Offices (PMOs), digital transformation, artificial intelligence, and executive leadership. He is the Founder and CEO of TP Global Business Consulting LLC and serves as Director for Central America and the Caribbean for the IEOM Society. With more than 38 years of international experience, he advises organizations on AI-enabled PMOs, enterprise governance, portfolio management, and strategic execution.

Dr. Prensa holds a Doctorate in Management and Leadership from the University of Phoenix and a Master's degree in Project Management from The George Washington University. He is an internationally sought-after keynote speaker, author, educator, and creator of the P.R.E.N.S.A. Framework and PMO-BP® methodology. His work focuses on helping organizations transform strategy into measurable business value through innovation, leadership, and decision intelligence.



Dr. Javier Sanchez-Galan
Professor of Systems Engineering
Universidad Tecnologica de Panamá, (Panamá)

Javier Sánchez-Galán is a Professor-Researcher at the Technological University of Panama, where he conducts interdisciplinary research in artificial intelligence, machine learning, bioinformatics, and computational biology. His work integrates advanced computing methods with data-driven solutions for scientific and healthcare applications. He earned his Ph.D. in Experimental Medicine and his M.Sc. in Computer Science (Bioinformatics) from McGill University. An active researcher and international speaker, Dr. Sánchez-Galán focuses on artificial intelligence, computational modeling, and data science to support innovation in healthcare, biology, and scientific research.



Dr. Alfonso Sarmiento
Chair, Industrial & Civil Engineering Departments
Universidad de La Sabana (Colombia)

Alfonso Sarmiento is a recognized expert in industrial engineering, operations research, logistics, and supply chain management, with extensive experience in research, higher education, and industry consulting. He serves as Associate Professor at Universidad de La Sabana, where he conducts research on simulation, mathematical optimization, sustainable supply chains, and transportation systems, while also contributing to industry-focused innovation and decision-support methodologies. Dr. Sarmiento holds a Ph.D. in Industrial Engineering from the University of Central Florida, a Master's degree in Operations Research with a specialization in Logistics, and a Bachelor's degree in Industrial Engineering from the University of Lima. An active researcher and international collaborator, his work focuses on sustainable supply chains, logistics, simulation, renewable energy systems, and public policy analysis through advanced analytical and optimization techniques.

August 5, 2026 – 3:30 – 4:50 pm

Panel 4: Sustainability, Energy, and Resilient Infrastructure

A conversation on the future of energy systems, sustainability, climate resilience, and infrastructure development, highlighting strategies to support economic growth, environmental stewardship, and long-term regional prosperity.

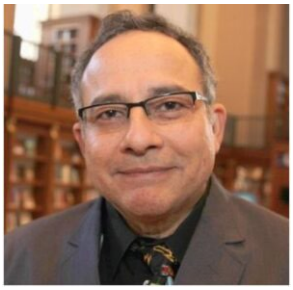
Co-Moderator: Ing/MBA Ivan Barría, CEO Pure New Energy Latam (Panamá)



Iván Barría is a distinguished energy executive and business leader with more than 15 years of experience in the energy sector across Latin America. He currently serves as CEO of Pure New Energy Latam, where he leads the development of renewable energy projects and sustainable energy solutions throughout the region.

Previously, Mr. Barría served as General Manager of ETESA (Empresa de Transmisión Eléctrica, S.A.), Panama's national electricity transmission company. During his tenure, he successfully led the construction of Panama's Third Transmission Line, a strategic infrastructure project valued at approximately $400 million, completed in half the time required for the country's previous transmission expansion. Under his leadership, Panama strengthened its energy security, improved system reliability, and significantly reduced electricity costs relative to neighboring countries.

Mr. Barría holds an MBA from INCAE Business School and a Bachelor's degree in Mechanical Engineering from Villanova University. He is widely recognized as a leading voice in energy policy, renewable energy, infrastructure development, and the future of sustainable energy systems in Latin America.



Co-Moderator: Ing/Mgt Julio Rovi, Professor, Universidad Tecnológica de Panamá (Panamá)

Julio Rovi, M.S. is an engineer, educator, entrepreneur, and energy consultant with more than 35 years of international experience in energy, sustainability, climate policy, and infrastructure development across 18 countries in the Americas. He currently serves as Professor of Mechanical Engineering at the Technological University of Panama and advises organizations throughout the region on energy efficiency, renewable energy, sustainable development, and climate resilience. Throughout his distinguished career, Mr. Rovi has held leadership positions in consulting, industry, academia, and government initiatives, contributing to national energy plans, sustainability programs, green building policies, and energy transition strategies. He has worked extensively on energy efficiency, renewable energy integration, smart cities, climate adaptation, and sustainable infrastructure projects in both North and Latin America. Mr. Rovi holds a Master of Science in Energy Management and Policy from the University of Pennsylvania and graduate studies in Social Systems Sciences from The Wharton School. He is widely recognized for his ability to integrate engineering, economics, public policy, and systems thinking to address complex energy and sustainability challenges.

Members

- **Ing/MBA Harmodio Araúz,** Asesor Regulatorio en Unidad Ejecutora Proyecto SIEPAC / Consejo Director MER (Panamá)
- **Melina Balderrama**, National Coordinator, Bolivia WATCH Program for Stockholm Environment Institute (SEI) (Bolivia)
- **Ing. Gustavo Bernal**, CEO in LK Panama (Panamá)
- **Dr. Charles Davis**, Associate Professor, Embry-Riddle University (USA)
- **Dr. Marwen Elkamel,** Department of Industrial Engineering & Management Systems, University of Central Florida (USA)
- **Rosilena Lindo Riggs,** Energy and climate professional, former energy secretary of Panamá, gender equality specialist (Panamá)
- **Carlos A. Vargas,** Distinguished Panamanian Water Resources Expert, Hydrologist, and Environmental Strategist (Panama)



Ing/MBA Harmodio Araúz, Asesor Regulatorio en Unidad Ejecutora Proyecto SIEPAC / Consejo Director MER (Panamá)

Harmodio Araúz is a distinguished Panamanian energy executive with more than 45 years of experience in electric power systems, energy markets, hydroelectric generation, and regional energy integration. He currently serves as Regulatory Advisor to the SIEPAC Project Executive Unit and the Regional Electricity Market (MER) Governing Council, while also acting as for ABCO Energy, where he supports hydroelectric, solar, and electricity market development projects. Throughout his career, Ing. Araúz has held senior leadership positions with the Panama Canal Authority (ACP), the National Dispatch Center (CND–ETESA), and regional energy organizations, leading initiatives in power system operations, energy dispatch, transmission planning, and electricity market regulation. He is widely recognized throughout Central America for his expertise in energy policy, power system operations, renewable energy, and regional electricity market integration.



Dr. Melina Balderrama, National Coordinator, Bolivia WATCH Program for Stockholm Environment Institute (SEI) (Bolivia)

Melina Balderrama is an Industrial Engineer with a PhD in Chemistry and Chemical Engineering (Industrial Engineering Program) from Universitat Ramon Llull, Barcelona, Spain. With more than 20 years of international experience, she specializes in the intersection of industrial systems, water governance, climate resilience, energy transition, and sustainable development. She currently serves as National Coordinator of the Bolivia WATCH Program at the Stockholm Environment Institute (SEI), where she co-leads WATCH Lithium, an initiative advancing hydrological modelling, water governance, and climate-informed planning for lithium-producing basins and other strategic critical mineral regions in South America. She is also an Adjunct Professor at the School of Engineering of the Universidad Privada Boliviana (UPB), following nearly a decade in academic leadership positions at the Universidad Católica Boliviana. Throughout her career, she has worked with the United Nations Development Programme (UNDP), national and subnational governments, universities, and international cooperation agencies, coordinating development initiatives financed by multilateral development banks and bilateral donors. Her work bridges scientific research, public

policy, strategic planning, and institutional strengthening to support resilient infrastructure, sustainable resource governance, and climate-informed development.



Ing Gustavo Bernal, CEO in LK Panama (Panamá)

Ing. Gustavo A. Bernal G. is a distinguished Panamanian engineer, business executive, and energy sector leader with more than 40 years of experience in electrical infrastructure, power transmission, energy markets, project development, and engineering management. He currently serves as General Manager and CEO of LK Panama, advising organizations on energy investments, infrastructure projects, and business development. He has held senior leadership positions in both the public and private sectors, including serving as Deputy General Manager of ETESA (Empresa de Transmisión Eléctrica, S.A.), Panama's national electricity transmission company. A respected leader within the engineering profession, he also served as President of the Panamanian Society of Engineers and Architects (SPIA). Ing. Bernal holds a degree in Electromechanical Engineering from the Technological University of Panama and an MBA with specialization in Project Formulation and Administration. He is widely recognized for his expertise in energy systems, electric markets, infrastructure development, and engineering leadership.



Dr. Charles Davis
Associate Professor
Embry-Riddle University (USA)

Charles W. Davis, Jr. is an Associate Professor of Engineering at Embry-Riddle Aeronautical University and a recognized leader in engineering education, leadership development, and systems engineering. He holds B.S., M.S., and Ph.D. degrees from the University of Central Florida and brings more than 25 years of industry experience and over 20 years in higher education. Dr. Davis is a Past President and Fellow of the Florida Engineering Society (FES) and has received numerous recognitions for his contributions to engineering education and professional leadership, including the 2025 Florida Engineering Society Engineering Faculty Member of the Year Award. His research focuses on leadership, systems engineering, virtual reality, digital twins, quality engineering, and engineering education, and he is the author of A Systematic Guide to Leadership Selection Using Total Quality.



Dr. Marwen Elkamel
Postdoctoral Fellow, Department of Industrial Engineering & Management Systems
University of Central Florida, Orlando, Florida

Dr. Marwen Elkamel is a Post Doctoral Fellow at the Department of Industrial Engineering & Management Systems at the University of Central Florida. He obtained a Bachelor degree with distinction in Economics with a minor in Management Studies from the University of Waterloo, Ontario, Canada and a Master of Science degree in Management (Business Analytics track) from the University of Central Florida. He received his Ph.D. in Industrial Engineering from the University of Central Florida in 2023. Before starting his PhD, he worked as a data analyst for WeCare tlc. During his undergraduate studies, he served as a Research Assistant at the Waterloo Institute for Sustainable Energy (WISE). He was involved in two different projects that encompassed the acquisition and summary of data and preparation of computer programs to simulate processes and to make appropriate conclusions. During his PhD studies, he has been preparing machine learning models for electricity consumption with the consideration of socio-economic factors. He was also involved in a project that dealt with power resources scheduling and planning. He is currently focusing on modeling and optimizing the Urban Food-Energy-Water Nexus in order to find more efficient ways to supply water, energy and food and manage natural resources that can aid in sustainable energy development and improved water and food security. He is a member of IEOM, IFORMS, and the Institute of Industrial & Systems Engineering. He has published several journal and conference papers in the areas of modeling, simulation, optimization, and big data analytics.



Ing/Mgt Rosilena Lindo Riggs, Energy and climate professional
Former energy secretary of Panamá, gender equality specialist (Panamá)

Eng. Rosilena Lindo is a distinguished global energy and climate advisor and a REN21 Senior Fellow. Currently serving on the GWNET International Advisory Board and as President of the Panamanian Chapter of the "Colectiva 50+1," she is a prominent advocate for gender equality in the energy sector.

As Panama's former National Secretary of Energy and former Undersecretary, Rosilena authored and edited over 15 national public policy instruments including Panama's Green Hydrogen Strategy and its first NDC under the Paris Agreement. Her landmark contributions include the National Green Hydrogen Strategy and the Universal Access to Energy plan, all developed through interdisciplinary processes with a rigorous gender lens. Previously, she served as the Executive Adviser to the Minister of Environment and National Climate Change Director, where she spearheaded Panama's first NDC under the Paris Agreement. Her technical foundations are equally robust, having served as a Quality Assurance Engineer for the Panama Canal Expansion.

She is an expert in Sustainable Energy Policy and Wholesale Electricity Markets with over two decades of leadership at the intersection of climate and energy. Her career is marked by the design of viable financial instruments for Panama's National Carbon Market and her role as a Senior Regional Expert for the UN Environment Programme, where she developed the solar water heating market in LAC.

Her academic background includes a Civil Engineering degree from Panama's Technological University and two M.Sc. degrees from UASLP (Mexico) and the Cologne University of Applied Sciences (Germany). She has received prestigious scholarships from CONACYT and DAAD and completed advanced coursework in Energy Transition at the Harvard Kennedy School of Government. A Civil Engineer A REN21 Senior Fellow and President of the Colectiva 50+1 (Panama Chapter), she is a renowned speaker and advocate for gender-inclusive energy transitions. In 2024, she was named Green Hydrogen Industry Regional Leader for Latin America and the Caribbean.

Beyond policy, Rosilena is an expert in ISO 14001 and OSHAS 18001 certifications. Her leadership has been recognized internationally; in 2022, she received the Mexican Energy Debate award for "Breaking Glass Ceilings," and in 2024, she was honored by the Panamanian Chinese community

for her dedication to energy education. She is a prolific communicator; she has spoken at over 450 international conferences and was recognized in 2024 as a Green Hydrogen Industry Regional Leader for LAC. Rosilena is fluent in Spanish, English, and German.

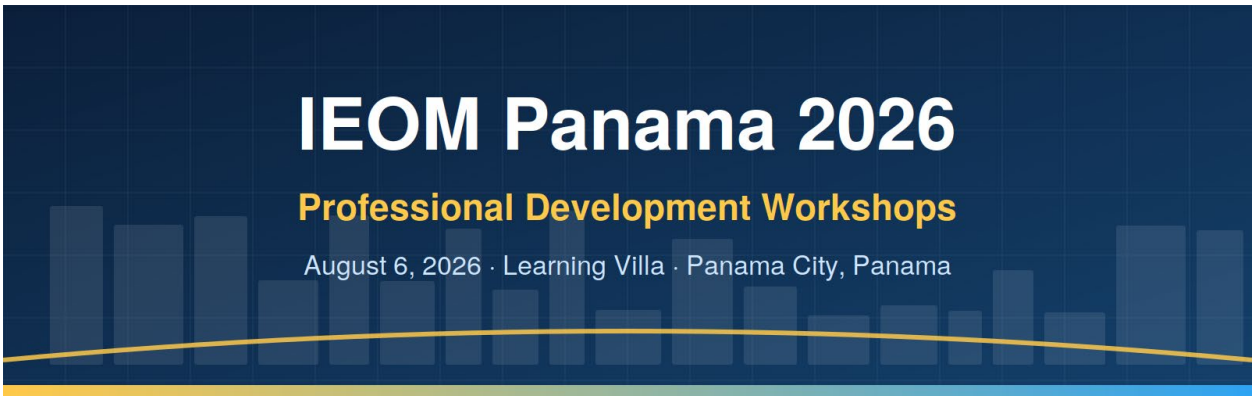


Carlos A. Vargas, Distinguished Panamanian Water Resources Expert, Hydrologist, and Environmental Strategist

Carlos A. Vargas is a distinguished Panamanian water resources expert, hydrologist, and environmental strategist with more than 30 years of experience in sustainable water management, environmental stewardship, infrastructure resilience, and national strategic planning. He currently serves as Water Resources and Environmental Systems Planning Analyst at the National Planning Directorate of Panama's Ministry of Economy and Finance and is an international consultant specializing in water resources and hydrology.

Previously, Ing/MBA Vargas served as Executive Vice President for Water, Environment, and Energy at the Panama Canal Authority, where he led the strategic management of water resources, environmental conservation, and energy systems supporting one of the world's most critical maritime infrastructures. He holds a Master of Science in Water Resources Systems and Hydrology from Cornell University as a Fulbright Scholar, an MBA from INCAE Business School, and a Bachelor of Science in Engineering from the Technological University of Panama. He is internationally recognized for his leadership in water governance, watershed management, climate resilience, and sustainable infrastructure, and has been an invited speaker at technical forums throughout the Americas, Europe, and Asia.

Workshops



IEOM Panama 2026 is pleased to offer six hands-on professional development workshops led by internationally recognized experts from academia and industry. These workshops provide practical knowledge, emerging technologies, and immediately applicable skills in engineering, operations management, artificial intelligence, digital transformation, quality, and continuous improvement.

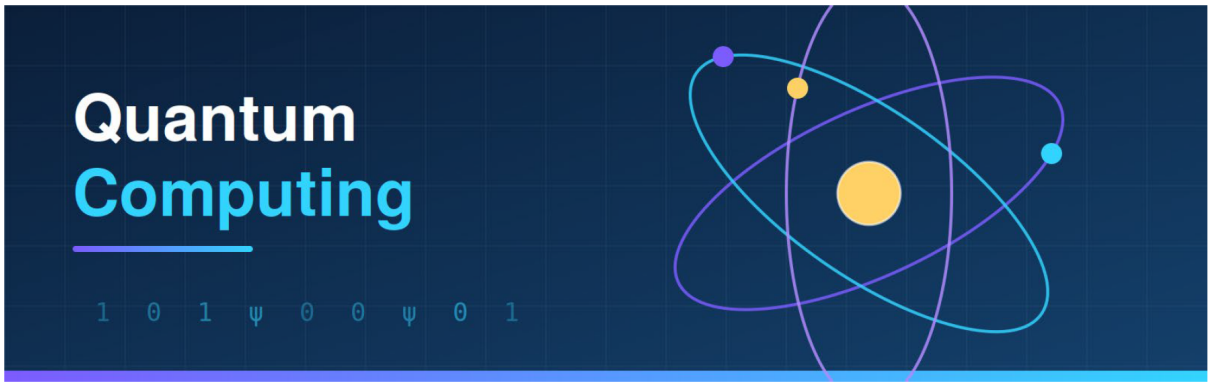
August 6, 2026 at U Latina Learning Vila

12:50 – 2:50	1. Quantum Computing — Dr. Cristian Barría (Chile)	2. Lean Six Sigma Yellow Belt Certification — Dr. José Flores (Peru) and Eng. José Sáenz (Panama)	3. Discrete-Event Simulation — Prof. Ahad Ali (USA)
3:00 – 5:00	4. Digitalization and Process Automation — Dr. Kay Winkler (Panama) and Dr. Maximiliano Jiménez (Panama)	5. Artificial Intelligence — Dr. Tony Prensa (USA), Dr. Javier Sánchez-Galán (Panama), Dr. Luis Rabelo (USA), Dr. Marwen Elkamel (Canada), and Dr. Edgar Gutiérrez (Colombia)	6. Entrepreneurship, Innovation and Business Incubation – Professor Don Reimer (USA)

Workshop Location
Learning Vila, Universidad Latina de Panamá (Ulatina)
Atrio Mall, 4th Floor, Avenida Marina del Norte
Costa del Este, Panama City, Panama

WORKSHOP PROGRAM AT A GLANCE

1	**Introduction to Quantum Computing** — Dr. Cristian Barría (Chile)
2	**Lean Six Sigma Yellow Belt Certification** — Dr. José Flores (Peru) and Eng. José Sáenz (Panama)
3	**Introduction to Discrete-Event Simulation** — Prof. Ahad Ali (USA)
4	**Digitalization and Process Automation** — Dr. Kay Winkler (Panama) and Dr. Maximiliano Jiménez (Panama)
5	**Introduction to Artificial Intelligence** — Dr. Tony Prensa (USA), Dr. Javier Sánchez-Galán (Panama), Dr. Luis Rabelo (USA), Dr. Marwen Elkamel (Canada), and Dr. Edgar Gutiérrez (Colombia)
6	**Entrepreneurship and Innovation** — Professor Don Reimer (USA)



WORKSHOP 1

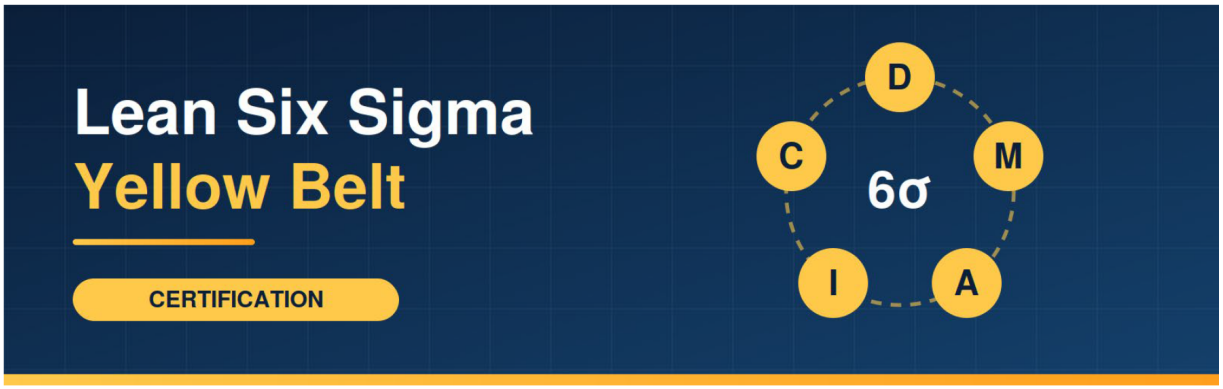
Introduction to Quantum Computing

Instructor(s): Dr. Cristian Barría (Chile)

> *Dr. Cristian Barría is an expert in quantum computing and emerging technologies, with extensive experience in research, engineering education, and the practical applications of quantum algorithms. He is a Director in Cybersecurity at Universidad Mayor in Chile.*

This introductory workshop provides engineers, researchers, and students with a practical understanding of quantum computing and its growing impact on optimization, artificial intelligence, cybersecurity, engineering, and scientific research. Participants will explore the fundamentals of quantum mechanics, qubits, quantum gates, and quantum algorithms, while discussing future industrial applications. No prior knowledge of quantum computing is required.

ESPAÑOL | *Este taller introductorio ofrece una visión práctica de la computación cuántica y su impacto en la optimización, la inteligencia artificial, la ingeniería y la investigación científica. Los participantes conocerán los fundamentos de los qubits, las puertas cuánticas y los algoritmos cuánticos, así como sus aplicaciones industriales futuras. No se requiere experiencia previa.*



WORKSHOP 2

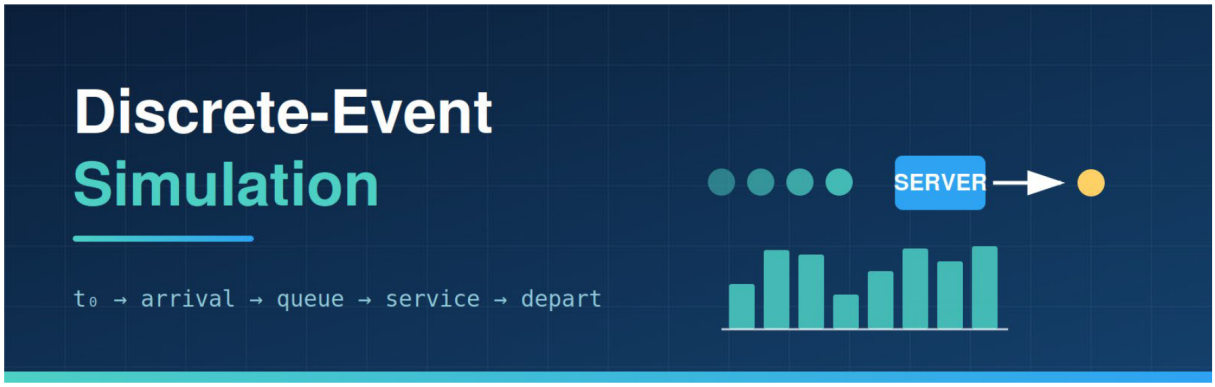
Lean Six Sigma Yellow Belt Certification

Instructor(s): Dr. José Flores (Peru) and Eng. José Sáenz (Panama)

> *Dr. José Flores is a Master Black Belt, Director of the Quality Institute at the Pontificia Universidad Católica del Perú, and former Vice President of the American Society for Quality (ASQ) for the Americas, with extensive international experience in Lean Six Sigma and Operational Excellence.*
>
> *Eng. José Sáenz is a recognized leader in Business Transformation, Operational Excellence, Lean Six Sigma, and Business Process Management, with extensive experience leading continuous improvement initiatives across multiple industries. He is a graduate from University of Central Florida.*

This interactive workshop introduces participants to Lean Six Sigma principles and continuous improvement methodologies. Topics include Lean thinking, waste reduction, DMAIC, process mapping, statistical thinking, quality tools, and practical applications in manufacturing, healthcare, logistics, and service industries. Participants who successfully complete the workshop assessment will receive an IEOM Lean Six Sigma Yellow Belt Certificate.

ESPAÑOL | *Este taller presenta los fundamentos de Lean Six Sigma y las metodologías de mejora continua. Los participantes aprenderán conceptos de Lean, reducción de desperdicios, DMAIC, mapeo de procesos, herramientas de calidad y aplicaciones prácticas en manufactura, salud, logística y servicios. Quienes aprueben la evaluación recibirán un Certificado Yellow Belt de IEOM.*



WORKSHOP 3

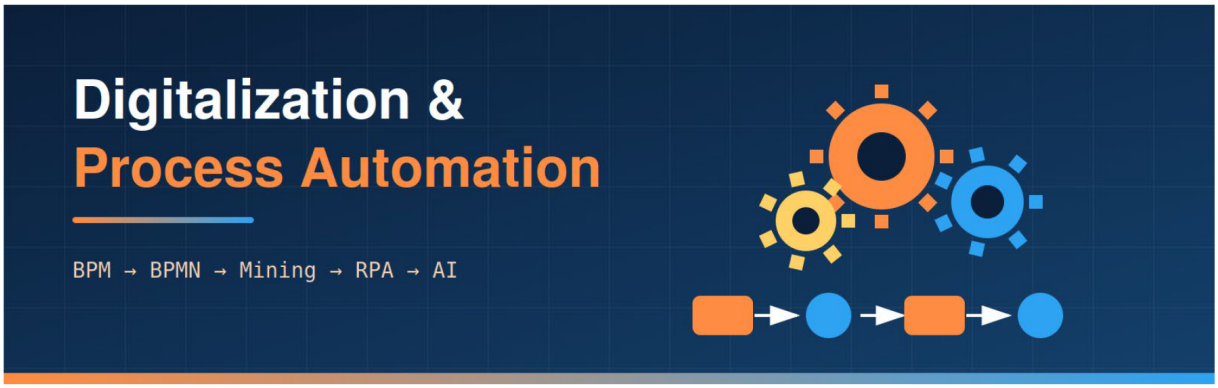
Introduction to Discrete-Event Simulation

Instructor(s): Prof. Ahad Ali (USA)

> *Prof. Ahad Ali has more than twenty-five years of experience applying simulation in industry, research, and education.*

This hands-on workshop introduces the complete simulation study process, including industrial data collection, statistical distribution fitting, model development using Arena, verification and validation, Design of Experiments (DOE), performance analysis, process improvement, and research publication development. Participants are encouraged to download the Arena Student Version and follow the live demonstrations. The Arena Student Version can be downloaded at: https://www.rockwellautomation.com/en-us/products/software/arena-simulation/buying-options/download.html

ESPAÑOL | *Este taller práctico introduce todo el proceso de un estudio de simulación: recolección de datos industriales, ajuste de distribuciones estadísticas, construcción de modelos en Arena, verificación y validación, Diseño de Experimentos (DOE), análisis de resultados y desarrollo de publicaciones científicas. Se recomienda instalar previamente Arena Student Version. Arena Student Version puede descargarse en: https://www.rockwellautomation.com/en-us/products/software/arena-simulation/buying-options/download.html*



WORKSHOP 4

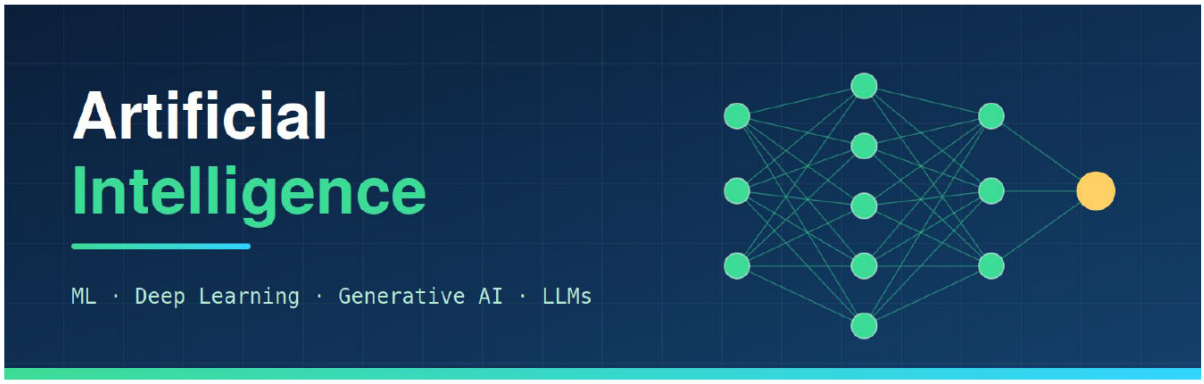
Digitalization and Process Automation

Instructor(s): Dr. Kay Winkler (Panama) and Dr. Maximiliano Jiménez (Panama)

> *Dr. Kay Winkler is an international expert in Business Process Management (BPM), digital transformation, process automation, and intelligent operations, with extensive experience implementing digital solutions for organizations worldwide.*
>
> *Dr. Maximiliano Jiménez is an international consultant and educator specializing in logistics, digital transformation, process improvement, and Business Process Management throughout Latin America.*

This workshop presents a practical roadmap from Business Process Management (BPM) to intelligent automation. Participants will learn process modeling, macro simulation with Arena, BPMN simulation, process mining with Apromore and Celonis, workflow automation using Flokzu, predictive analytics with RapidMiner, and the integration of Artificial Intelligence and Large Language Models into business processes.

ESPAÑOL | *Este taller presenta un recorrido práctico desde la Gestión de Procesos de Negocio (BPM) hasta la automatización inteligente. Incluye BPMN, simulación con Arena, minería de procesos con Apromore y Celonis, automatización con Flokzu, análisis predictivo con RapidMiner e integración de Inteligencia Artificial y modelos de lenguaje en procesos empresariales.*



WORKSHOP 5

Introduction to Artificial Intelligence

Instructor(s): Dr. Tony Prensa (USA), Dr. Javier Sánchez-Galán (Panama), Dr. Luis Rabelo (USA), Dr. Marwen Elkamel (Canada), and Dr. Edgar Gutiérrez (Colombia)

Dr. Tony Prensa is an internationally recognized expert in artificial intelligence, strategic PMOs, digital transformation, and executive leadership, with more than 38 years of international consulting and executive experience.

Dr. Javier Sánchez-Galán is an expert in artificial intelligence, data analytics, and digital technologies, with extensive experience applying AI to engineering, education, and organizational innovation. One of the AI leaders in Panama.

Dr. Luis Rabelo is a Professor at the University of Central Florida and an internationally recognized researcher in artificial intelligence (3 international patents), systems engineering, modeling and simulation, logistics, and digital engineering.

Dr. Marwen Elkamel is an expert in artificial intelligence, machine learning, digital twins, and data-driven engineering systems, with research focused on intelligent decision-support technologies.

Dr. Edgar Gutiérrez is an internationally recognized expert in supply chain analytics, operations research, artificial intelligence, machine learning, optimization, simulation, and digital transformation, with extensive experience applying advanced analytics to logistics, retail, manufacturing, and sustainable supply chain systems.

This workshop provides a comprehensive introduction to Artificial Intelligence, beginning with its historical evolution and continuing through today's advances in machine learning, deep learning, generative AI, and Large Language Models. Real-world engineering and business applications, ethical considerations, and future trends will be presented through practical examples and demonstrations.

ESPAÑOL | *Este taller ofrece una introducción completa a la Inteligencia Artificial, desde su evolución histórica hasta los avances actuales en aprendizaje automático, aprendizaje profundo, IA generativa y modelos de lenguaje. Se presentarán aplicaciones reales en ingeniería y negocios, junto con aspectos éticos y tendencias futuras.*

Innovation and Entrepreneurship Workshop

Workshop Facilitator: Professor Don Reimer, Lawrence Tech, MI, USA

Each team will develop an idea to solve an engineering problem that may have commercial potential. They will develop a business plan using the business model canvas. Teams will compete for prizes with the best ideas and the best commercial potential. Students need to bring their laptops.

Innovation and Entrepreneurship Workshop – A hands-on interactive learning experience

This workshop has been designed to encourage participants in a hands-on interactive learning experience on the development of the entrepreneurial mindset

Topics:

Idea Generation
Opportunity Recognition
Ventura Creation
Value Creation
Understanding and working with the Business Model Canvas as a validation tool
Identifying "Customer Segments" and the "Customer Archetype"
Introduction to the Business Planning Process
Presentation and Recognition (Prizes)
Join us for an exciting and interactive learning experience on how to make your dream a reality.

Professor Donald M. Reimer
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA
Chief Operating Officer, IEOM Society

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs' Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs' Organization Faculty Advisory Council and is a member of the American Society of Engineering Education.

He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

Conference Committee

Conference Chairs:

Ing. José Barrios Ng, President and Chairman of the Board, Universidad Latina de Panama

Prof. Oscar León, Founder, President and Chairman of the Board, Quality Leadership University (QLU), Panama

Dr. Humberto Alvarez, Professor and Associated Dean of Research, Graduate Studies and Outreach Programs, Industrial Engineering School, Technological University of Panama (UTP), Panama

Dr. Luis Rabelo, Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, FL, USA

Dr. Maximiliano E. Jiménez, Management Consultant and Past Dean of Business School, Universidad Santa María La Antigua (USMA), Panama

Dr. Ahad Ali, Associate Professor, Director, Doctor of Engineering in Advanced Manufacturing and Director of Industrial Engineering Programs (BSIE and MSIE), Lawrence Technological University, Southfield, Michigan, USA and CEO of IEOM Society International, USA

Program Chairs

Professor Don Reimer, Chief Operating Officer (COO), IEOM Society International, USA

Dr. Mario Chauca, National Technological University of South Lima, Peru

South American Organizing Committee

Argentina

DEA Ing. Calixto Maldonado
Dr. Eng. Federico Walas Mateo (Integrated manufacturing systems Professor at Universidad Nacional Arturo Jauretche, Argentina and CEO and Founder of Chaska Analytics

Bolivia

M.Sc. Ginamaria Garcia Garces, Directora de la carrera de Ingeniería Industrial, Departamento de Ciencias Exactas e Ingeniería, Universidad Católica Boliviana, Sede Académica de Cochabamba, Bolivia

Chile

Dr. Cristian Barria, Professor, Director, Master of Engineering and Information Security, Director of the Cybersecurity Research Center, Universidad Mayor, Santiago, Chile

Colombia

Dr. Johanna Trujillo Díaz, Investigador en Estancia Post Doctoral – Proyecto Orquídeas, Facultad de Ciencias Económicas y Administrativa, Universidad Cooperativa de Colombia, Bogotá, Colombia

Ecuador

Ximena Córdova Vallejo, Profesora, Colegio de Ciencias e Ingenierías, Politécnico Universidad San Francisco de Quito, Ecuador

Paraguay

Dr. Jorge Kurita, Research Faculty, Department of Industrial Engineering, Asuncion National University, Paraguay

Peru

Dr Mario Chauca, Professor, Engineering Department, National Technological University from South Lima, Lima, Perú

Uruguay

Dr Martin Tanco, Universidad de Montevideo, Uruguay
Julio C. Sosa, Professor, Catholic University of Uruguay, Montevideo, Uruguay

Venezuela

Dr. Ebert Brea, Full Professor at Escuela de Ingeniería Industrial, & Research Associate at Centro de Investigación y Desarrollo de Ingeniería, Universidad Católica Andrés Bello, Caracas, Venezuela

Dr. Martín Enrique Durán García, Profesor Asociado / Director, Departamento de Tecnología Industrial, Universidad Simón Bolívar, Sartenejas, Miranda, Venezuela

Program Committee

- Ana Carla Souza Gomes dos Santos, Tecnologia do Rio de Janeiro (IFRJ) and Instituto Federal de Educação, Ciência CEFET/RJ, Brazil
- Augusto César Barreto Rocha, UFAM – Universidade Federal do Amazonas, Brazil
- Carlos A. Mariño Del Rosario, Pontificia Universidad Católica del Perú
- Carlos Ernani Fries, Federal University of Santa Catarina, Brazil
- Carlos Raymundo, Universidad Peruana de Ciencias Aplicadas, Lima, Peru
- Chanan Syan, University of the West Indies, St Augustine Campus, Trinidad and Tobago
- Claudia León Chávarri, Universidad Peruana de Ciencias Aplicadas (UPC), Monterrico, Santiago de Surco, Peru
- Cristina González, Universidad Católica de Colombia, Bogotá, Colombia
- Daniel Nascimento, Universidade Federal Fluminense, Brazil
- Diego Fettermann, Universidade Federal de Santa Catarina, Brazil
- Diogo Aparecido Lopes Silva, Federal University of São Carlos – Sorocaba, Brazil
- Dra. Lorena BearzottiPontificia Universidad Católica de Valparaíso, Chile
- Dra. Patrícia Silva Ferreira, IFRJ (Federal Institute of Technological Education of Rio de Janeiro), Brazil
- Ebert Brea, School of Industrial Engineering (SIE), Catholic University Andrés Bello (UCAB), Caracas, Venezuela
- Edson Pinheiro de Lima, Pontifical Catholic University of Parana, Curitiba – Brazil
- Eduardo F. Silva, Universidade Federal de Santa Catarina (UFSC), Brazil
- Eduardo Redondo National University of Asuncion, Asuncion, Paraguay
- Elena Espinoza Rios, Universidad Continental, Peru
- Enzo Morosini Frazzon, Federal University of Santa Catarina (UFSC), Brazil
- Fáber D. Giraldo, System and Computer Engineer, University of Quindío, Quindío, Colombia
- Fabiana Lucena Oliveira, Universidade do Estado do Amazonas, Brazil
- Felipe Serafini, Universidade Federal do Rio Grande do Sul, Brazil
- Felix Badilla-Murillo, Instituto Tecnológico de Costa Rica
- Franklin Cordova-Buiza, Universidad Norte, Peru
- Gilson Ditzel Santos, Federal University of Technology – UTFPR/Campus Pato Pato Branco, Brazil
- Guilherme Tortorella, Federal University of Santa Catarina (UFSC), Brazil
- Guilherme Tortorella, Universidade Federal de Santa Catarina, Brazil
- Gustavo Campos Avendaño, Universidad Konrad Lorenz, Colombia
- Henrique Vieira, FACENS University, Sorocaba, Sao Paulo, SP, Brazil
- Hernan Nina Hanco Universidad Nacional de San Antonio Abad del Cusco, Cusco, Peru
- Hugo Chacón Moscoso, Universidad de San Martín de Porres, Peru, Lima
- Humberto Alvarez, Universidad Tecnologica de Panama
- Husham A. Ali Elbaloula, State University of Campinas- UNICAMP, Brazil
- Ignacio Laiton P., Escuela Tecnológica Instituto Técnico Central, Bogotá, Colombia
- Jaime Fernando Perez Gonzalez, La Universidad Católica De Colombia
- Johanna Trujillo Díaz, Universidad Cooperativa de Colombia, Bogotá
- José Antonio Larco, Universidad de Ingeniería y Tecnología – UTEC, Peru
- José Lázaro Ferraz, FACENS University, Sorocaba, Sao Paulo, Brazil
- Juan Carlos Quiroz-Flores, Universidad de Lima, Peru
- Juan Carlos Ruiz-Carrera, Universidad Tecnica de Ambato, Ecuador
- Juan Jeús Arenas Pontificia Universidad Católica del Perú San Miguel, Lima
- Juan S. Sánchez-Gómez, Universidad Católica de Colombia, Bogota
- Julián Arellana, Universidad del Norte, Barranquilla, Colombia
- Julio Cesar González-Silva, Universidad Nacional Abierta y a Distancia UNAD – Colombia
- Katerine Becerra Universidad Peruana de Ciencias Aplicadas, Lima, Peru
- Lauro Enciso Rodas, Universidad Nacional de San Antonio Abad del Cusco, Cusco, Peru
- Lauro Enciso, Universidad Nacional de San Antonio Abad del Cusco, Perú
- Luciano Costa, Universidade Federal da Paraíba, Brazil
- Lucila Campos, Department of Production Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, SC, Brazil
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- Marcelo Trentin, Universidade Tecnológica Federal do Paraná, Brazil
- Marco Antonio Barbosa Braga CEFET/RJ, Brazil
- Mario C. Vélez G., Universidad EAFIT, Colombia
- Martín R. Dorante, Universidad Católica Andrés Bello, Caracas, Venezuela
- Mga William Eduardo Mosquera Laverde, Universidad Cooperativa de Colombia
- Miguel Avalos Ortecho Edilberto, University of Lima, Peru

- Milton Mauricio Herrera, Universidad Militar Nueva Granada, Bogota, Colombia
- Moacyr Machado Cardoso Junior, Instituto Tecnológico de Aeronáutica, São José dos Campos, SP, Brazil
- Monica Giuliano, Universidad Nacional de Hurlingham, Argentina
- of Industrial Engineering, Universidad Católica de Colombia, Bogota
- Omar Mora, Blackberry&Cross, Costa Rica
- Paloma María Teresa Martinez Sanchez – Universidad El Bosque, Bogotá, Colombia
- Peter Fernandes Wanke, Universidade Federal do Rio de Janeiro
- Rebeca Caceres UMIP, Ancon, Panama
- Ricardo Alexandre Diogo, Professor Adjunto, PUCPR – Pontifícia Universidade Católica do Paraná, Curitiba, Paraná, Brazil
- Ricardo Pimenta IBICT/UFRJ, Brazil
- Roberto Antonio Martins, Federal University of Sao Carlos (UFSCar), Brazil
- Rodrigo Caiado, Universidade Federal Fluminense, Brazil
- Rodrigo Ruiz, CTI Renato Archer, Campinas, Brazil
- Sandro Breval, Universidade Federal do Amazonas, Brazil
- Sandro Paz, Pontificia Universidad Catolica del Peru, Lima, Peru
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- Victor H. Molina, Technical University of Ambato, Ambato, Ecuador
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- Muhammad Abid, Ghulam Ishaq Khan Institute of Eng Sci & Tech, Pakistan
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- Genesis Abah Agbo, IMT Atlantique Nantes France
- Gianfranco Muncinelli, Pontificia Universidade Catolica do Parana, Brazil
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- Ing. Nelson R. Becerra E., Ingeniero Industrial, Santiago de Cali, Colombia
- Jarin Canaza Fernandez, Logistics and Operations Specialist, Bolivia
- Jason Junsong Bian, Rennes School of Business, Rennes, France
- Javier Dario Fernandez Ledesma, Puerta de Oro Empresa de Desarrollo Caribe, Barranquilla, Atlántico, Colombia
- Jiaxi Zhu, Google, USA
- Jihong Yan, Harbin Institute of Technology, China
- Jorge Kurita, Asuncion National University San Lorenzo, Paraguay
- Jorge Luis García Alcaraz, Autonomous University of Ciudad Juarez Mexico
- Jorge Rendulich Talavera, Universidad Nacional de San Agustín, Arequipa, Perú
- José Velásquez Costa, Research Professor, Industrial Engineering Program. Peruvian University of Applied Sciences, Peru
- Juan Carlos Herrera Vega, Universidad de San Pedro Sula USAP, Peru
- Juan Rosales García, UGTO, Mexico
- Júnior Aparecido Assandre, UFSCAR, Brazil
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- Lilian Adriana Borges, UNIDAVI, Brazil
- Lionel Amodeo, University of Technology of Troyes, France
- Liz Fabiola Esquivel Maldonado, UNA, Paraguay
- Luis Fernando Pedraza Ruiz, Fundacion Universitaria de Popayan, Colombia
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- Mai Elgazzar, Alexandria, Egypt
- Maíra Rocha, Professora, Universidade de Brasília, Federal District, Brazil
- Maria Teresa Noriega, Faculty of Engineering, University of Lima, Peru
- Maria Zemzami, Mohammed V University, Morocco
- Mariannys Rodríguez, Industrial Engineering, Brazil
- Mariel Perez Reyes, University of Lima, Peru
- Maximiliano Arroyo Ulloa, USAT, Chiclayo – Perú
- Mazhar Hussain, CESI Strasbourg, France
- Michele Kremer Sott, PROGESP – Pró-Reitoria de Gestão com Pessoas – UFCSPA, Porto Alegre, Rio Grande do Sul, Brazil
- Mohammed Dahane, Université de Lorraine, France
- Omar C G, Omar C G, Universidad Autonoma of Ciudad Juarez, Mexico
- Paula De Camargo Fiorini, Ph.D., Federal University of Sao Carlos – UFSCar, Sorocaba, Sao Paulo – Brazil
- Paulo Sérgio de Arruda Ignácio, State University of Campinas, Brazil
- Pedro Lopes, Centro Paula Souza, Brazil
- Piero Arditto Xavier, University of Lima, Peru
- Priyanka Annapureddy, Kenco Logistics, Chattanooga, TN, USA
- Quy Nguyen, Université de Technologie de Troyes, France
- Rodrigo Linfati, UBIOBIO, Chile
- Rolando Rodriguez, M-Cube S.p.A., Trieste, Italy
- Sachin Modgil, IMI Kolkata, India
- Sebastián Fernández, University of Lima, Peru
- Shaligram Pokharel, Qatar University, Qatar
- Shuang MA, University of Science and Technology Beijing, China
- Sonia Ikken-Benali, CESI LINEACT, France
- Sridhar Thirumalai, Walmart, USA
- Sunil Tiwari, University of Bristol Business School, UK
- Surajit Bag, CERIIM, India
- Suzhen Liang, Rennes School of Business, Rennes, France
- Talat Mahmud Chowdhury, KUET, Bangladesh
- Valeria Contreras Fernández, UDEM, Mexico
- Victor Martin Maldonado Benitez, IPN, Mexico
- Willinghon G. Gámez Araújo, Universidad Antonio Nariño, Colombia
- Wilson Carlos da Silva Junior, IFSP, Brazil
- Yalaoui Farouk, Université de Technologie de Troyes, France
- Yuan Yuan, Northwestern Polytechnical University, China
- Yue Wang, The Education University of Hong Kong, China
- Zhe Yuan, De Vinci Research Center, Paris, France
- Ziaul Haq Adnan, North South University, Dhaka, Bangladesh

Conference Schedule

Day 1 – August 4, 2026 (Tuesday) – Miramar Grand Ballroom (3rd Floor)

08:00 - 17:00	Registration			Zoom Room
08:30 - 08:40	Conference Opening: Ing. José Barrios Ng, President and Chairman of the Board, Universidad Latina de Panamá			8:00 – 10:00 Competitions
08:40 - 09:20	Keynote 1: Dr. Ying Xie, Director of Logistics Cluster, University of Central Florida (USA)			
09:20 - 10:00	Keynote 2: Dr. Luis Rocha Lona, Professor in Operations Management, Business School, National Polytechnic Institute of Mexico			10:00 – 12:00 SCM
10:00 - 10:40	Keynote 3: Dr. Ivan Garibay, Associate Professor, Industrial Engineering and Management Systems, University of Central Florida			
	10:40 – 11:00 - Break			12:00 – 14:00 BM & OM
11:00 - 11:30	Keynote 4: Dr. Dario Solís, Business Development Director for Innovation and Technology Partnerships, Arizona State University			
11:30 - 12:00	Keynote 5: Dr. Juan Marcos Castillo, Professor, Universidad Tecnológica de Panamá (UTP), Panama			14:00 – 16:00 Sustainability
13:00 - 14:00	Lunch - Miramar Grand Ballroom			
	Afternoon Technical Sessions – Breakout Rooms			
	Room 1 – Miramar Grand Ballroom	Room 2 – Harbor View (Level 6)	Room 3 - Park View (Level 6)	
14:00 - 15:20	**Panel 1 - Women Leaders in STEM**	Computer Science Track	Lean Six Sigma and Quality	
15:20 - 15:30	Networking Tea Break			
	Poster Session 4:00 – 6:00 pm. Bring Your Printed Posters. Display Your Posters during the whole conference.			
15:30 - 16:50	**Panel 2 - Logistics and Ports**	Computer Science Track	Engineering Education Competitions	

Day 2 – August 5, 2026 (Wednesday) – Miramar Grand Ballroom (3rd Floor)

08:00 - 17:00	Registration			Zoom Room
08:30 - 08:40	Opening Remarks: Prof. Oscar León, Founder, President and Chairman of the Board, Quality Leadership University (QLU), Panama			8:00 – 10:00 AI & DS
08:40 - 09:20	Keynote 6: Mariana Leon, Academic VP, Researcher, and Professor, Quality Leadership University – University of Louisville Panama			
09:20 - 10:00	Keynote 7: Dr. Maria Auxiliadora Cannarozzo Tinoco, Associate Professor in Industrial Engineering, Universidade Federal do Rio Grande do Sul (UFRGS), Brazil			10:00 – 12:00 Lean Six Sigma
10:00 - 10:40	Keynote 8: Dr. Cristian Rincon, Associate Professor and Researcher, UNIMINUTO, Colombia			12:00 – 14:00 EM & PM
	10:40 – 11:00 - Break			
11:00 - 11:30	Keynote 9: Dr. Elida de Obaldía, Professor, Universidad Tecnológica de Panamá			14:00 – 16:00 Project Management
11:30 - 12:00	Keynote 10: Enitza George, MD, MBA, MSAI, Physician Executive, Society of Teachers of Family Medicine (STFM) AI Task Force, USA			
12:00 - 12:30	Keynote 11: Dr. Fernando Gonzalez Aleu, CPEM, Professor and Researcher, Universidad de Monterrey (UDEM), NL, Mexico			
12:30 - 13:00	Keynote 12: Dr. Alfonso Sarmiento, Associate Professor, Industrial Engineering, University of La Sabana, Chía, Colombia			
13:00 - 14:00	Lunch - Miramar Grand Ballroom			
	Afternoon Technical Sessions – Breakout Rooms			
	Room 1 – Miramar Grand Ballroom	Room 2 – Harbor View (Level 6)	Room 3 - Park View (Level 6)	
14:00 - 15:20	**Panel 3 – AI in the curriculum**	Digital Manufacturing, Industry 4.0 and IoT	Computer Science Track	
15:20 - 15:30	Networking Tea Break			
15:30 - 16:50	**Panel 4 - Sustainability, Energy, and Resilient Infrastructure**	Simulation and Optimization	Sustainability	
17:00 - 18:00		Artificial Intelligence and Data Science	Supply Chain and Logistics	
19:00 - 22:00	**Awards Dinner - Miramar Grand Ballroom**			

Day 3 – Thursday, August 6, 2026 – U Latina Learning Vila (Atrio Mall – 4th Floor)

08:00 - 17:00	Registration					Zoom Room
08:45 - 08:55	Opening Remarks: Dr. Ángela Laguna Caicedo, President, Technological University of Panama (UTP)					8:00 – 10:00 Case Studies & Best Practices
08:55 - 09:10	Conversatorio/Conversation – A conversation about the Quality Institute. Their organization, projects, and success in Peru. Dr. José Carlos Flores Molina, Director, Quality Institute, Pontificia Universidad Católica del Perú (PUCP), Peru					
09:10 - 09:50	Keynote 13: Dr. Luis Rabelo, Professor, Department of Industrial Engineering & Management Systems, University of Central Florida					10:00 – 12:00 Quality
10:25 - 11:00	Keynote 14: Dr. Charles W. Davis, Jr., Associate Professor of Engineering, Embry-Riddle Aeronautical University Daytona Beach Keynote 15: Edgar Gutierrez-Franco, PhD, Associate Professor, Externado University of Colombia					12:00 – 14:00 Computer Science Track
11:00 - 11:50	**Conversatorio/Conversation - Leadership at the Highest Level: A Conversation with Two of Latin America's Most Influential CEOs** **Pedro Heilbron, CEO, Copa Airlines, Panama** **Jorge Salas, CEO, Bladex - Banco Latinoamericano de Comercio Exterior (Foreign Trade Bank of Latin America), Panama**					14:00 – 16:00 Entrepreneurship and Innovation
	Room 1	Room 2	Room 3	Room 4	Room 5	
12:50 - 14:50	**Six Sigma Yellow Belt Workshop**	**Quantum Computing Workshop**	**Simulation Workshop**	Artificial Intelligence and Data Science	Supply Chain and Port Logistics	
15:00 – 17:00	**Digitalization Workshop**	**AI Workshop**	**Entrepreneurship Workshop**	Business Management and Operations Management	Case Studies and Simulation	

August 4, 2026 (Tuesday) – Day 1

8:00 - 17:00 Registration

August 4, 2026 (Tuesday) - Session: 8:30 – 13:00

8:30 – 13:00, Tuesday **Onsite Miramar Grand Ballroom**

Opening and Keynotes

8:30 am - 08:40 am: Conference Opening

Dr. José Barrios Ng
President and Chairman of the Board
Universidad Latina de Panama

8:40 am – 9:20 am: Keynote 1

Dr. Ying Xie
Director of Logistics Cluster
University of Central Florida (USA)

9:20 am – 10:00 am: Keynote 2

Dr. Luis Rocha Lona
Professor in Operations Management, Business School
National Polytechnic Institute of Mexico
México City, Mexico
Tec de Monterrey, Campus Santa Fe

10:00 am – 10:40 am: Keynote 3

Dr. Ivan Garibay
Associate Professor
Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

10:40 am – 11:00 am: Break

11:00 am - 11:30 am: Keynote 4

Dr. Dario Solís
Business Development Director for Innovation and Technology Partnerships
Ira A. Fulton Schools of Engineering
Arizona State University (ASU)
Tempe, Arizona, USA

11:30 am – 12:00 pm: Keynote 5

Dr. Juan Marcos Castillo
Professor
Universidad Tecnológica de Panamá (UTP)
Panama

Title of Presentation: The Potential Title: Uncertainty Management in the Supply Chain: Math, Tech, and Wisdom

12:00 pm – 12:30 pm: Keynote 6

Mr. Cristian Rincon
Associate Professor and Researcher
UNIMINUTO
Colombia

Title of Presentation: Manufacturing in a VUCA World: Evolving from Resilience Recovery to Antifragile Advantage

13:00 – 14:00 - Lunch – Marina Grand Salon

August 4, 2026 (Tuesday) - Session: 14:00 – 15:20

14:00 – 15:20, Tuesday **Onsite Room 1 (Marina Grand Salon)**

Panel I
Women Leaders in STEM

A discussion among distinguished leaders on advancing women's participation and leadership in STEM education, while addressing emerging challenges and opportunities for future generations.

Moderator: Dr. Marcela Paredes de Vásquez, Professor, Universidad Tecnológica de Panamá (UTP) (Panamá)

Members:
- Ing/Mgt Melanie Castillo, Coordinator of Graduate Programs, Quality Leadership University (Panamá)
- Dr. Mónica Aurora Puertas, Associate Director, Instituto para la Calidad, Pontificia Universidad Católica del Perú (Perú)
- Ing/Mgt Eyda Ramos, President, Universidad Interamericana de Panamá (Panamá)
- Dr. Alice Smith, US National Academy of Engineering Member, Auburn University (USA)
- Ing. Andria Villarreal, Presidenta de la Asociación Panameña de Ingenieros Industriales y Afines (Panama)

August 4, 2026 (Tuesday) - Session: 14:00 – 15:20

14:00 – 15:20, Tuesday **Onsite Breakout Room 2**

Session Chair: Carlos Rodriguez-Chong, Universidad Tecnológica de Panamá, Panama

Computer Science Track

ID 38 A Real-Time AI-Based Passenger Crowding Detection System for Public Transportation Using Deep Learning and IoT Communication
Lucia Cárdenas, Universidad Tecnológica de Panamá, Panama

ID 47 NEDAF: A Modular Framework for Complex Network Analysis on Mid-Range Hardware
Juan José Chavarría, Universidad Tecnológica de Panamá, Panama

ID 55 Design and Development of a Virtual Reality Therapeutic Scenario with Computer Vision to Enhance Hand Rehabilitation Processes
Carlos Rodriguez-Chong, Universidad Tecnológica de Panamá, Panama

ID 88 A Python-OpenGATE Monte Carlo Workflow for Radiation Exposure Scenario Analysis in Nuclear Medicine
Christian Acosta Lemus, Faculty of Biosciences and Public Health, Specialized University of the Americas (UDELAS), Panama, Panama

ID 91 A Zero Trust-Oriented Cloud Architecture for Securing Electronic Health Records: A Pilot Implementation with OpenEMR and DoS Stress Testing
Carolina Campos, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá, Panamá
Alfredo Lescher, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá, Panamá
Centro Internacional de Investigación en vida y Ciencias de la Salud (CIVSAL), Universidad Latina de Panamá (ULATINA), Panamá, Panamá
Ernesto Ibarra, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá, Panamá
Centro Internacional de Investigación en vida y Ciencias de la Salud (CIVSAL), Universidad Latina de Panamá (ULATINA), Panamá, Panamá
Jay Molino, Facultad de Biociencias y Salud Pública, Universidad Especializada de las Américas (UDELAS), Panamá, Panamá
Centro de Biotecnologías, Energías Verdes y Cambio Climático (BEVCC), Universidad Especializada de las Américas (UDELAS), Panamá, Panamá

August 4, 2026 (Tuesday) - Session: 14:00 – 15:20

14:00 – 15:20, Tuesday **Onsite Breakout Room 3**

Session Chair: Sharareh Taghipour, Toronto Metropolitan University, Toronto, Ontario, Canada

Lean Six Sigma and Quality

ID 50 Process Capability Analysis of Lead Time in a Clinical Laboratory Process: A Colombian Case Study
Ivanhoe Rozo-Rojas, María Alejandra Jaimes-Quintanilla, Nury Vibella Manrique-Torres and Jesús Alberto Romero-Riascos, Corporación Universitaria Minuto de Dios, Bogota, Colombia

ID 51 Process Capability Analysis of Weight Variability in Portioned Beef Production: A Colombian Case Study
Ivanhoe Rozo-Rojas, María Alejandra Jaimes-Quintanilla, Camilo Andrés Gordillo-Guzmán and Carlos Andrés Novoa-Poveda, Corporación Universitaria Minuto de Dios, Bogota, Colombia

ID 7 Joint Optimization of Manufacturing Operations under Non-Homogeneous Deterioration
Sharareh Taghipour, Associate Professor and Canada Research Chair in Physical Asset Management, Toronto Metropolitan University, Toronto, Ontario, Canada
Azam Kheyri, Postdoctoral Fellow, Toronto Metropolitan University, Toronto, Ontario, Canada

ID 54 OEE-Based Performance Improvement in a Portioned Beef Production Process: A Colombian Case Study
Ivanhoe Rozo-Rojas, María Alejandra Jaimes-Quintanilla and Camilo Andrés Arismendy-Cárdenas, Corporación Universitaria Minuto de Dios Bogota, Colombia

ID 161 A Comprehensive Structure for Applying Cognitive Engineering, Systems Engineering, and the Integration of Virtual Simulation to Cultivate Engineering Leadership Skills
Charles Davis, Embry-Riddle Aeronautical University, United States

15.20 – 15.30: Break

August 4, 2026 (Tuesday) - Session: 16:00 – 18:00

Poster Session (16:00 – 18:00: Day 1)

ID 22 Cultivating Probabilistic Thinking: An Experiential Simulation of Process Variation and Tampering
Christine Benz, Central Connecticut State University, New Britain, Connecticut, USA
Mohammad Rahman, Central Connecticut State University, New Britain, Connecticut, USA

ID 27 Teaching Industrial Engineering Courses 100% Online: An Instructional Design Framework & Quality Assurance Protocol
Lisa Bosman, Purdue Polytechnic Institute, Purdue University, West Lafayette, IN, USA

ID 40 Comparative Evaluation of Open-Source Deep Learning-Based OCR Engines for the Digitalization of Clinical Documents
Stanislava Ursulyak, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama
Javier E. Sanchez-Galan, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama

ID 41 Considerations for the Development of an Intelligent System for Evaluating Mobility and Muscle Electrical Activity of the Lower Extremities during Gait in Healthy Adults
Gabriela Guevara, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama
Delky Meza-Valderrama, Instituto Nacional de Medicina Física y Rehabilitación – INMFRE, Caja de Seguro Social Panama City, Panama
Jose C. Rangel, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama
Javier E. Sanchez-Galan, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama

ID 42 Comparing SMILES and SLICES Representations for Property Prediction of Molecules and Inorganic Crystals via Deep Learning
Cristelle Madrid, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama

Chris Bartel, Department of Chemical Engineering and Materials Science, University of Minnesota, Minnesota, USA
Javier E. Sanchez-Galan, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama

ID 71 An AI-Enabled Digital Twin Framework for Safe, Scene-Aware Lunar Rover Autonomy
Carson Gray, Jennifer Cifuentes, Abdiel Joseph, Matteo D'Agostino, Jonathan Gyure, Noah Y. Choi, Sean Crites, Luis C. Rabelo and Mansooreh Mollaghasemi, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

ID 85 Low-cost ECG signal acquisition and monitoring system for the early detection of cardiac abnormalities based on AD8232 and ESP32
Harold Lucho, Jhoan Gutiérrez, Elisvan Quispe and Leticia Rodríguez, Faculty of Electronic Engineering and Telecommunications, National Technological University of South Lima, Lima, Peru
Mario Chauca, Faculty of Electronic Engineering and Telecommunications, National Technological University of South Lima, Lima, Peru

ID 136 SORTCYCLE: Intelligent Automation System for the Sustainable Management of Solid Waste in Panama
Ana Paola Freitez Del Río and Cristell del Carmen Cedeño Prestán, Undergraduate Students in Mechatronics Engineering, Universidad Latina de Panamá, Panama City, Panama

August 4, 2026 (Tuesday) - Session: 15:30 – 16:50

15:30 – 16:50, Tuesday **Onsite Room 1 (Marina Grand Salon)**

Panel II
Logistics and Ports

A panel examining the future of ports, logistics, transportation systems, and supply chains, with a focus on competitiveness, resilience, digital transformation, and economic development.

Co-Moderator: Dr. Maximiliano Jiménez, Consultant and Professor, Quality Leadership University (Panamá)
Co-Moderator: Dr. Mansooreh Mollaghasemi, Director of IE Graduate Programs, University of Central Florida (USA)

Members

Dr. Jorge Barnett Lawton, Director of Georgia Tech Panama Logistics Innovation & Research Center (Panama)
Dr. Zoila Castillo, Profesora de la Universidad Tecnologica de Panama (Panama)
Ing/MBA Hernando Garzon Saenz, Docente en Fundación Universitaria Tecnológico Comfenalco Cartagena (Colombia)
Dr. Edgar Gutierrez, Director Data Analytics Center, Externado University/University of Central Florida (Colombia, USA)
Eduardo Tapiero, Economic Advisor – National Planning Institute for Development of Panama (Panama)
Dr. Ricardo Ungo, Director of the Maritime, Ports and Logistics Management Institute, Old Dominion University (USA)
Dr. Ying Xie, Director of Logistics Cluster, University of Central Florida (USA)

August 4, 2026 (Tuesday) - Session: 15:30 – 16:50

15:30 – 16:50, Tuesday **Onsite Breakout Room 2**

Session Chair: Cristian Rincón Guio, Corporación Universitaria Minuto de Dios – UNIMINUTO, Colombia

Computer Science and AI

ID 92 An Interpretable Software Framework for Standardizing Multi-Vendor Biomedical Equipment Maintenance Procedures
Alexandra Rivera, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá
Alfredo Lescher, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá, Panamá and Centro Internacional de Investigación en Ciencias de la vida y la salud (CIVSAL), Universidad Latina de Panamá, Panamá
Ernesto Ibarra, Facultad de Ingeniería, Escuela de Ingeniería Biomédica e Instrumentación, Universidad Latina de Panamá (ULATINA), Panamá, Panamá and Centro Internacional de Investigación en Ciencias de la vida y la salud (CIVSAL), Universidad Latina de Panamá, Panamá, Panamá
Jay Molino, Facultad de Biociencias y Salud Pública, Universidad Especializada de las Américas (UDELAS), Panamá, Panamá and Centro de Biotecnologías, Energías Verdes y Cambio Climático (BEVCC), Universidad Especializada de las Américas (UDELAS), Panamá

ID 96 A Chromatic Feature-Based Computer Vision Workflow for Neonatal Jaundice Screening from Digital Images
Natalia Fernández-Chanis, Asdrúal Rojas and Jay Molino, Universidad Especializada de las Américas (UDELAS), Facultad de Biociencias y Salud Pública, Centro de Biotecnología, Energías Verdes y Cambio Climático, Panama, Panama

ID 118 Scalable Detection of Maritime Operational Zones Through Hierarchical Hexagonal Indexing and Optimized DBSCAN
Javier E. Sanchez-Galan, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama
Martin Gomez, Department of Computer Systems Engineering, Universidad Tecnológica de Panamá, Panama City, Panama
Gabriel Moises Fuentes, Department Business and Management Science, Centre for Shipping and Logistics, Norwegian School of Economics, Bergen, Norway

ID 127 Predicting Transit and Waiting Times in the Panama Canal Using Machine Learning Models
Katherine Batista, Universidad Tecnológica de Panamá, Panamá
Kely Feng, Universidad Tecnológica de Panamá, Panamá
Jeremías Herrera, Universidad Tecnológica de Panamá, Panamá
Victoria Rodríguez, Universidad Tecnológica de Panamá, Panamá
Miguel Vanzania, Universidad Tecnológica de Panamá, Panamá

Juan Castillo, Universidad Tecnológica de Panamá, Panamá

ID 23 Explainable Transfer Learning for Cross-Material Surface Roughness Prediction in Machining
Gennisse Forte and Christian Zamiela, Department of Industrial and Systems Engineering, Auburn University, Auburn, Alabama, USA
Alice E. Smith, Departments of Mechanical Engineering and Computer Science, University of Alabama, Tuscaloosa, Alabama, USA

August 4, 2026 (Tuesday) - Session: 15:30 – 16:50

15:30 – 16:50, Tuesday **Onsite Breakout Room 3**

Session Chair: Marwen Elkamel - University of Central Florida, USA

Engineering Education and Curriculum Improvement

ID 48 Educating Engineering Managers in Panama: Lessons Learned from Over Two Decades of a Dual Degree Program
Mariana León, Quality Leadership University, Panama City, Panama
Oney Chalá, Quality Leadership University, Panama City, Panama
Faisal Aqlan, J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky, USA

ID 134 Artificial Intelligence Integration in Architecture, Engineering, and Construction (AEC) Education: A Review
Olugbenro Ogunrinde, Assistant Professor, Construction Science and Management, Engineering Technology, Tarleton State University, Stephenville, Texas
Afolabi, Adedeji, Assistant Professor, Construction Science and Management, Engineering Technology, Tarleton State University, Stephenville, Texas
Billy Gray, Associate Professor, Engineering Technology, Tarleton State University, Stephenville, Texas
Tulio Sulbaran, Professor, Klesse College of Engineering and Integrated Design, The University of Texas – San Antonio, San Antonio, Texas, USA

ID 138 Mapping Engineering Curricula based on the Semiconductor Value Chain: A Portfolio-Level Coverage Analysis in an Emerging Economy
Ana Deng, Juan Marcos Castillo and Zoila Yadira Guerra de Castillo, Universidad Tecnológica de Panamá, Panama City, Panama

ID 141 Visibility and Recognition Gaps of Women in Engineering
María Valentina Ruiz Morales, Student Industrial Engineering, Universidad Militar Nueva Granada, Bogotá, Colombia
Daniela Janeth Flórez Rodríguez, Student Industrial Engineering, Universidad Militar Nueva Granada, Bogotá, Colombia
Paloma Martínez-Sánchez, Industrial Engineering Professor, Universidad Militar Nueva Granada, Bogotá, Colombia

Senior Design Project Competition

ID 82 Predictive Planetary Robotics: An AI-Driven Digital Twin Framework for Resilient Lunar Surface Operations
D. Alvarado, B. Barcelo, L. Carvalho, K. Collazo, D. Dilip, D. Hires and M. Urbina Barrios, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida 32816, USA
Carson Gray, Luis Rabelo and Mansooreh Mollaghasemi, Department of Industrial Engineering and Management Systems, University of Central Florida

Human Factors and Ergonomics Competition

ID 86 The Contextual Adjustment Mechanism (CAM): A Dual-Layer Framework for Contextual Regulation in Socio-Institutional Service Systems
Alexis Rios, Universidad del Istmo, Panama

August 5, 2026 (Wednesday) – Day 2

8:00 - 17:00 Registration

August 5, 2026 (Wednesday) - Session: 8:30 – 13:00

8:30 – 13:00, Wednesday **Onsite Miramar Grand Ballroom**

Keynotes

8:30 am - 8:40 am: Welcome Remarks

Prof. Oscar León
Founder, President and Chairman of the Board
Quality Leadership University (QLU), Panama

8:40 am – 9:20 am: Keynote 7

Mariana Leon
Academic Vice President, Researcher, and Professor
Quality Leadership University – University of Louisville Panama
Researcher at Centro de Investigación Educativa (CIEDU)
Panama

9:20 am – 10:00 am: Keynote 8

Dr. Maria Auxiliadora Cannarozzo Tinoco
Associate Professor in Industrial Engineering
Universidade Federal do Rio Grande do Sul (UFRGS), Brazil

10:00 am – 10:40 am: Keynote 9

Dr. Elida de Obaldía
Professor, Universidad Tecnológica de Panamá
Representative of Panama's Advanced Semiconductor Technology Center (C-TASC)

11:00 am – 11:40 pm: Keynote 10

Enitza George, MD, MBA, MSAI
Physician Executive, Society of Teachers of Family Medicine (STFM) AI Task Force and co-Chair
STFM AI Collaborative. Health Systems Program Ambassador
Binghamton University. Binghamton, New York. USA

11:40 pm – 12:20 pm: Keynote 11

Fernando Gonzalez Aleu, Ph.D. CPEM
Professor and Researcher
Engineering Department
Universidad de Monterrey (UDEM)
Monterrey, NL, Mexico

12:20 pm – 1:00 pm: Keynote 12

Dr. Alfonso Sarmiento
Associate Professor
Industrial Engineering
Faculty of Engineering
University of La Sabana
Chía, Colombia

Presentation Title: From Single-Paradigm to Hybrid Simulation: Methodologies for Integrated Modeling

13:00 – 14:00 - Lunch – Miramar Grand Ballroom

August 5, 2026 (Wednesday) - Session: 14:00 – 15:20

14:00 – 15:20, Wednesday **Onsite Room 1 (Marina Grand Salon)**

Panel III
AI in the Curriculum

Co-Moderator: Yaravi Cardoze, Past President of PMI Panama
Co-Moderator: Ing/MBA Galileo Solís, Science and Technology Lead Specialist at the Inter-American Development Bank (IDB) (Panamá)

Members

Dr. Cristian Barria, Universidad Mayor (Chile)
Dr. Hector Flores, Universidad Distrital, Colombia
Dr. Tony Prensa, CEO, TP Global Business Consulting LLC, Orlando, Florida, USA
Dr. Alfonso Sarmiento, Chair IE & Civil Engineering, Universidad de La Sabana (Colombia)
Dr. Javier Sanchez-Galan, Professor of Systems Engineering, Universidad Tecnologica de Panama, (Panama)

August 5, 2026 (Wednesday) - Session: 14:00 – 15:30

14:00 – 15:20, Wednesday **Onsite Breakout Room 2**

Session Chair: Obeth Gabriel Ponte Zárate, Universidad del Istmo, Panama

Digital Manufacturing, Industry 4.0 and IoT

ID 26 Industry 4.0 Adoption in U.S. Chartered Banks: The Role of State Regulatory Environments & Organizational Capacity
Carlos Andrés Merlano Porras and Lisa Bosman, Purdue Polytechnic Institute, Purdue University, West Lafayette, IN, USA

ID 72 Design and Experimental Validation of an IoT-Based System for Benzene Monitoring and Reduction in Vehicle Cabins
Marcial Angulo, Carlos Huaman, José Rodríguez, Juan Villanueva and Mario Chauca, Universidad Nacional Tecnológica de Lima Sur (UNTELS)
Sector 3 Grupo 1A Sublote 3, Av. Central, Villa El Salvador, Lima, Peru

ID 80 Sustainable health in patients with pressure ulcers using a sensitive fibre using IoT technology
Alain Ramos Salcedo, Miguel Ángel Del Castillo Beltrán, Dávila La Torre César Junior and Chauca Saavedra Mario Bernabé, Universidad Nacional tecnológica de Lima Sur - Lima, Perú

ID 81 Low-cost ECG signal acquisition and monitoring system for the early detection of cardiac abnormalities based on AD8232 and ESP32
Harold Lucho, Jhoan Gutiérrez, Elisvan Quispe and Leticia Rodríguez, Faculty of Electronic Engineering and Telecommunications, National Technological University of South Lima, Lima, Peru
Mario Chauca, Faculty of Electronic Engineering and Telecommunications, National Technological University of South Lima, Lima, Peru

ID 100 Design of an IoT-Based System for Soil Monitoring and Decision Support in Agricultural Crop Management
Obeth Gabriel Ponte Zárate, Universidad del Istmo, Panama

August 5, 2026 (Wednesday) - Session: 14:00 – 15:20

14:00 – 15:20, Wednesday **Onsite Breakout Room 3**

Session Chair: Swarnamouli Majumdar, Concordia University, Canada

Computer Science Track

ID 139 The Influence of Wind on Corn Supply Chain at Panama
Rodrigo Yángüez, José Tobar, Francisco Tudisco, Magdiel Gutierrez and Juan Castillo, Universidad Tecnológica de Panamá, Panama

ID 140 Prediction of CO_2 emissions in ships in transit and arrival at the Panama Canal using machine learning models and H3 spatial indexing
Brandon Martínez, Master of Science in Data Analytics, Technological University of Panama, Panama
Juan Marcos Castillo, Technological University of Panama (UTP), Panama
Gabriel Fuentes, NHH Norwegian School of EconomicsBergen, Norway

ID 146 Intelligent Data Architectures for Urban Crime Intelligence Using Graph-Based Learning
Swarnamouli Majumdar, Concordia University, Canada

ID 147 Stability-Certified Multi-Criteria Portfolio Optimization for Connected and Automated Border Freight Gateways
Swarnamouli Majumdar, Concordia University, Canada

15.20 – 15.30: Break

August 5, 2026 (Wednesday) - Session: 15:30 – 16:50

15:30 – 16:50, Wednesday **Onsite Room 1 (Marina Grand Salon)**

Panel IV
Sustainability, Energy and Resilient Infrastructure

Co-Moderator: Ing/MBA Ivan Barría, CEO Pure New Energy Latam (Panamá)
Co-Moderator: Ing/Mgt Julio Rovi, Professor, Universidad Tecnológica de Panamá (Panamá)

Members

Ing/MBA Harmodio Araúz, Asesor Regulatorio en Unidad Ejecutora Proyecto SIEPAC / Consejo Director MER (Panamá)
Melina Balderrama, National Coordinator, Bolivia WATCH Program for Stockholm Environment Institute (SEI) (Bolivia)
Ing. Gustavo Bernal, CEO in LK Panama (Panamá)
Dr. Charles Davis, Associate Professor, Embry-Riddle University (USA) and Former President of the Florida Engineering Society (USA)
Dr. Marwen Elkamel, Department of Industrial Engineering & Management Systems, University of Central Florida (USA)
Ing/Mgt Rosilena Lindo Riggs, Energy and climate professional, former energy secretary of Panamá, gender equality specialist (Panamá)
Carlos A. Vargas, Distinguished Panamanian Water Resources Expert, Hydrologist, and Environmental Strategist

August 5, 2026 (Wednesday) - Session: 15:30 – 16:50

15:30 – 16:50, Wednesday **Onsite Breakout Room 2**

Session Chair: Gina Villafañe, Department of Management Science and Engineering, University of Waterloo, Waterloo, Ontario, Canada

Simulation and Optimization

ID 37 Integrated Crane Maintenance Planning with Berth Allocation, Quay Crane Assignment, and Emissions Reduction Considerations
Sahian Rosales and Jorge Barnett, Georgia Tech Panama Logistics Innovation and Research Center, Panama City, Panama
Gabriel Fuentes, Department of Business Management Science, NHH Norwegian School of Economics, Bergen, Norway

ID 46 Optimization of Assembly Times for a Main Back Workstation in an Appliance Plant Using Linear Programming
Cristina Manzanares Galindo, Facultad de Estudios Superiores, Universidad De La Salle Bajío, Salamanca, Gto., México
Miguel Angel Gómez Martínez, División de Ingenierías del Campus Irapuato-Salamanca, Universidad De Guanajuato, Salamanca, Gto, México
Mario Chauca, Facultad de Ingeniería, Ricardo Palma University, Lima, Santiago de Surco 15039, Peru

ID 84 Maximizing University Student Intake under Resource Capacity Constraints: A Linear Programming Approach
Ahmed El-Bouri, Department of Operations Management and Business Statistics, College of Economics and Political Science, Sultan Qaboos University, Oman

ID 90 A Partition-Based Scheduling Model for the Panama Canal
Gina Villafañe and James H. Bookbinder, Department of Management Science and Engineering, University of Waterloo, Waterloo, Ontario, Canada

ID 93 Production Scheduling in the Fruit-Based Beverage Juice Industry using System Dynamics
Shellyanne Wilson, Senior Lecturer, Department of Management Studies, Faculty of Social Sciences, The University of the West Indies, St. Augustine, Trinidad, W.I., Trinidad

ID 144 Collective Intelligence Modeling in the Colombian Hospitality Sector: A Genomic and Simulation-Based Approach
Lindsay Álvarez-Pomar, Professor, Department of Industrial Engineering, Universidad Distrital Francisco José de Caldas, Bogotá, Colombia

August 5, 2026 (Wednesday) - Session: 15:30 – 16:50

15:30 – 16:50, Wednesday **Onsite Breakout Room 3**

Session Chair: Sara Rezaee Vessal, Information Systems, Data Analytics and Operations Department, ESSEC Business School, Cergy, France

Sustainability

ID 35 Techno-Economic and Environmental Assessment of Alternative Marine Fuel Adoption in Panama Canal Operations

Onur Yuksel, Liverpool Logistics Offshore and Marine Research Institute (LOOM), School of Engineering, Liverpool John Moores University, Byrom Street, Liverpool L3 3AF, UK
Zonguldak Bülent Ecevit University, Marine Engineering Department, Maritime Faculty, Kepez District, Hacı Eyüp Street, No:1 67300, Zonguldak, Türkiye
Eduardo Blanco-Davis, Liverpool Logistics Offshore and Marine Research Institute (LOOM), School of Engineering, Liverpool John Moores University, Byrom Street, Liverpool L3 3AF, UK
Gabriel Fuentes, Norwegian School of Economics (NHH), Department of Business and Management Science, Helleveien 30, 5045 Bergen, Norway
Torstein Takvam, Norwegian School of Economics (NHH), Department of Business and Management Science, Helleveien 30, 5045 Bergen, Norway
Nikolaos Tsoulakos, Laskaridis Shipping Co., Ltd., 5 Xenias Str. and Ch. Trikoupi, Kifissia, 14562 Athens, Greece
David Hitchmough, Liverpool Logistics Offshore and Marine Research Institute (LOOM), School of Engineering, Liverpool John Moores University, Byrom Street, Liverpool L3 3AF, UK

ID 52 Sustainability Performance Assessment of Portioned Beef Production Using Lean and Green Manufacturing: A Colombian Case Study
Ivanhoe Rozo, María Jaimes, and Meibis Díaz, Corporación Universitaria Minuto de Dios, Bogota, Colombia

ID 76 Environmental Impact Assessment and Life Cycle Cost Analysis of Civil Infrastructure with Sustainable Materials
Grecia Avellaneda and Elton Mariño, Department of Civil Engineering, Ricardo Palma University, Lima, Perú

ID 94 Governing or Absorbing Supplier ESG Risk? Discipline, Lock-In, and Portfolio Compensation in Buyer Sourcing
Ali Shantia, HEC Paris, Jouy-en-Josas, France
Sara Rezaee Vessal, ESSEC Business School, Cergy, France
Sam Aflaki, HEC Paris, Jouy-en-Josas, France

ID 99 Transparency and Power Dynamics: A Game-Theoretic Analysis of Supply Chain Due Diligence Regulations
Sara Rezaee Vessal, Information Systems, Data Analytics and Operations Department, ESSEC Business School, Cergy, France
Ali Shantia and Sam Aflaki, Information Systems and Operations Management Department, HEC Paris, Jouy-en-Josas, France

August 5, 2026 (Wednesday) - Session: 17:00 – 18:00

17:00 – 18:00, Wednesday **Onsite Breakout Room 2**

Session Chair: Anilys Rodriguez, Georgia Tech Panamá, Panama

Artificial Intelligence and Data Science

ID 30 Literature Review: Artificial Intelligence Versus Human Intelligence A Complementary or Competitive Relationship
Musiwalo Mawela, Tshwane University of Technology, South Africa

ID 49 Temporal Analysis of Urban Sprawl Growth in the Metropolitan Area of Panama Using Google Open Buildings 2.5D Data
Anilys Rodriguez, Georgia Tech Panamá, Panama

ID 53 Benchmarking Deep Learning Backbones for Real-Time Vehicle Classification of Panamanian Urban Traffic
Isabel Flores Navarro; Fabio Reinoso, Ing.; Gabriela Girón Valderrama, Ph.D., Georgia Tech Panama Foundation, Panama City, Panama

August 5, 2026 (Wednesday) - Session: 17:00 – 18:00

17:00 – 18:00, Wednesday **Onsite Breakout Room 3**

Session Chair: Gabriel Fuentes, NHH Norwegian School of Economics, Norway

Supply Chain Management and Logistics

ID 31 Operational Characterization of Multi-Stop Air Cargo Flights: A Data-Driven Analysis of a Mexican Dedicated Cargo Carrier
David-Leonardo Padilla-Georgge, Faculty of Engineering, Logistics, Manufacturing and Automotive (FILMA), UPAEP – SECIHTI, Puebla, 21 South 1103 Barrio Santiago C.P 72410, Puebla, Mexico
Diana Sánchez-Partida, Faculty of Engineering, Logistics, Manufacturing and Automotive (FILMA), UPAEP – SECIHTI, Puebla, 21 South 1103 Barrio Santiago C.P 72410, Puebla, México
Patricia Cano-Olivos, Faculty of Engineering, Logistics, Manufacturing and Automotive (FILMA), UPAEP - SECIHTI
Puebla, 21 South 1103 Barrio Santiago C.P 72410, Puebla, Mexico
Santiago-Omar Caballero-Morales, Faculty of Engineering, Logistics, Manufacturing and Automotive (FILMA), UPAEP – SECIHTI, Puebla, 21 South 1103 Barrio Santiago C.P 72410, Puebla, Mexico

ID 33 Auction-Based Model for Green Supplier Selection and Order Assignment
Chefi Triki, Kent Business School, University of Kent, Canterbury, UK
Sadeque Hamdan, Bangor Business School, Bangor University, Bangor, UK
Simona Mancini, Department of Engineering, University of Palermo, Palermo, Italy

ID 39 The Panama Canal Drought and Shifts in U.S.–China Grain Flows
Gabriel Fuentes, NHH Norwegian School of Economics, Norway

ID 83 Sequence-Dependent Warm-Up Scheduling in Multi-Product EPQ under Carbon Tax Policy
Amir Hossein Nobil, School of Engineering and Sciences, Tecnológico de Monterrey, Monterrey, Mexico

19:00 – 22:00 (Wednesday, August 5)
Awards Ceremony – Gala Dinner

August 6, 2026 (Thursday) – Day 3

8:00 - 17:00 Registration

August 6, 2026 (Thursday) - Session: 8:30 – 13:00

8:30 – 13:00, Thursday **Onsite ULatina Learning Vila**

Keynotes

8:45 am - 8:55 am: Welcome Remarks

Dr. Ángela Laguna Caicedo
President
Technological University of Panama (UTP)

8:55 am - 9:10 am: Conversatorio/Conversation – A conversation about the Quality Institute. Their organization, projects, and success in Peru.

Dr. José Carlos Flores Molina
Director, Quality Institute
Pontificia Universidad Católica del Perú (PUCP), Peru

9:10 am - 9:50 am: Keynote 13:

Dr. Luis Rabelo
Professor
Department of Industrial Engineering & Management Systems
University of Central Florida

9:50 am - 10:25 am: Keynote 14:

Dr. Charles W. Davis, Jr.
Associate Professor of Engineering
Embry-Riddle Aeronautical University Daytona Beach

10:25 am - 11:00 am: Keynotes 15

Edgar Gutierrez-Franco, PhD
Associate Professor
Externado University of Colombia

11:00 am - 11:50 am: Conversatorio/Conversation

Leadership at the Highest Level:
A Conversation with Two of Latin America's Most Influential CEOs

Pedro Heilbron
CEO
Copa Airlines
Panama

Jorge Salas
CEO
Bladex - Banco Latinoamericano de Comercio Exterior (Foreign Trade Bank of Latin America)
Panama

August 6, 2026 (Thursday) - Session: 12:50 – 14:20

12:50 – 14:20, Thursday **Onsite Room 1 (Learning Vila)**

Workshop I

Quantum Computing Workshop

Dr. Cristian Barría (Chile)

August 6, 2026 (Thursday) - Session: 12:50 – 14:20

12:50 – 14:20, Thursday **Onsite Room 2 (Learning Vila)**

Workshop II

Six Sigma Yellow Belt Workshop

Dr. José Flores (Peru) and Eng. José Sáenz (Panama)

August 6, 2026 (Thursday) - Session: 12:50 – 14:20

12:50 – 14:20, Thursday **Onsite Room 3 (Learning Vila)**

Workshop III

Simulation Workshop

Prof. Ahad Ali (USA)

August 6, 2026 (Thursday) - Session: 12:50 – 14:20

12:50 – 14:20, Thursday **Onsite Room 4 (Learning Vila)**

Session Chair: Ricardo Ungo, School of Supply Chain, Logistics, and Maritime Operations, Old Dominion University, Norfolk, VA 23529, USA

Artificial Intelligence and Data Science

ID 56 Shocks and Consumer Food Prices: A Computational Design of Experiments Analysis in Panama (2017–2025)
Mgter. Lina Lay Mendivil, Coordinadora del Grupo de Investigación en Nutrición y, Sistemas Alimentarios Saludables y Sostenibles (INSAS – UTP) Universidad Tecnológica de Panamá, Panama
Grupo de Investigación de Desarrollo de, Producción Agroalimentaria Sostenible (DEPAS – UP), Universidad de Panamá, Panama City, Panama
Dra. Gema Castillo-Sánchez, Facultad de Ingeniería de Sistemas Computacionales, Universidad Tecnológica de Panamá, Panama City, Panama

ID 74 Neuroevolutionary Synthesis of Semiconductor Crystal Structures

Luiyiana Pérez, Coordinadora del grupo de Investigación IPROTIC, Facultad de Ingeniería de Sistemas Computacionales, Universidad Tecnológica de Panamá, Centro Regional de Azuero, Los Santos, Panamá
Alan Delgado, Estudiante tesista miembro del Grupo de Investigación IPROTIC, Universidad Tecnológica de Panamá- Centro Regional de Azuero Los Santos, Panamá

ID 75 Neuroevolutionary Synthesis of Semiconductor Crystal Structures
Alan Delgado, Estudiante tesista miembro del Grupo de Investigación IPROTIC, Universidad Tecnológica de Panamá- Centro Regional de Azuero, Los Santos, Panamá
Luiyiana Pérez, Coordinadora del grupo de Investigación IPROTIC, Facultad de Ingeniería de Sistemas Computacionales, Universidad Tecnológica de Panamá, Centro Regional de Azuero, Los Santos, Panamá

ID 117 Governing the Invisible: A Process, Power, and Practice Framework for Responsible AI in Healthcare
Enitza George, MD, MBA, MSAI, Physician Executive, Society of Teachers of Family Medicine (STFM) AI Task Force and co-Chair STFM AI Collaborative. Health Systems Program Ambassador, Binghamton University. Binghamton, New York. USA
Mohammad T. Khasawneh, PhD, Director, School of Systems Science and Industrial Engineering. Binghamton University. Binghamton, New York. USA

August 6, 2026 (Thursday) - Session: 12:50 – 14:20

12:50 – 14:20, Thursday **Onsite Room 5 (Learning Vila)**

Session Chair: Humberto Álvarez, Facultad de Ingeniería Industrial, Universidad Tecnológica de Panamá Panama City, Panama

Supply Chain and Port Logistics

ID 145 Translating AI Exposure Indices into a Work-based Training Framework for Supply Chain and Maritime Industry
Ricardo Ungo, School of Supply Chain, Logistics, and Maritime Operations, Old Dominion University, Norfolk, VA 23529, USA
Nadiya Ungo, Department of Educational Leadership and Workforce Development, Darden College of Education and Professional Studies Old Dominion University, Norfolk, VA 23529, USA

ID 178 Gatún Lake as an Indicator of Port Cargo Redistribution in Panama: A Retrospective and Predictive Analysis
Carla Fula, Abraham Goti and Jorge Zúñiga, Facultad de Ingeniería Industrial Universidad Tecnológica de Panamá Panama City, Panama
Humberto Álvarez, Associated Dean of Research, Graduate Studies, and Outreach Programs Facultad de Ingeniería Industrial, Universidad Tecnológica de Panamá Panama City, Panama

15:00 – 17:00, Thursday, August 6

August 6, 2026 (Thursday) - Session: 15:00 – 17:00

15:00 – 17:00, Thursday **Onsite Room 1 (Learning Vila)**

Workshop IV
Digitalization Workshop

Dr. Kay Winkler (Panama) and Dr. Maximiliano Jiménez (Panama)

August 5, 2026 (Thursday) - Session: 15:00 – 17:00

15:00 – 17:00, Thursday **Onsite Room 2 (Learning Vila)**

Workshop V
AI Workshop

Dr. Tony Prensa (USA), Dr. Javier Sánchez-Galán (Panama), Dr. Luis Rabelo (USA), Dr. Marwen Elkamel (Canada), and Dr. Edgar Gutiérrez (Colombia)

August 5, 2026 (Thursday) - Session: 15:00 – 17:00

15:00 – 17:00, Thursday **Onsite Room 3 (Learning Vila)**

Workshop VI
Entrepreneurship Workshop

Prof. Don Reimer (USA)

August 6, 2026 (Thursday) - Session: 15:00 – 17:00

15:00 – 17:00, Thursday **Onsite Room 4 (Learning Vila)**

Session Chair: Billy Gray, Associate Professor, Engineering Technology, Tarleton State University, Stephenville, Texas, USA

Business Management and Operations Management

ID 143 Supply Chain Robustness: A Conceptual Framework for Semiconductors
Katherinne F. Villavicencio Arce, Zoila de Castillo and Juan M. Castillo, 1 Universidad Tecnológica de Panamá, Facultad de Ingeniería Industrial, Universidad Tecnológica de Panamá, Panama

ID 98 Keeping Pace with Growth: Vehicle Counting Stations and Population Trends in Texas (2012–2021)
Tulio Sulbaran, Professor1, Klesse College of Engineering and Integrated Design, The University of Texas – San Antonio, San Antonio, Texas
Afolabi, Adedeji and Olugbenro Ogunrinde, Assistant Professor, Construction Science and Management, Engineering Technology, Tarleton State University, Stephenville, Texas
Billy Gray, Associate Professor, Engineering Technology, Tarleton State University, Stephenville, Texas

ID 25 Success and failure factors of MSMEs to strengthen operational management
Julián David González Zapata, Department of Industrial and Systems Engineering, Universidad Nacional de Colombia, Bogotá D.C. Colombia
Bertha Viviana Ruales Guzmán, Instituto de Ciencia y Tecnología de Alimentos, Universidad Nacional de Colombia, Bogotá D.C. Colombia
Angelo Cavallo, Instituto de Ciencia y Tecnología de Alimentos, Politecnico di Milano, Milano, Italia

ID 95 A Design Science Research Approach to Supporting Operational Management in Early-Stage MSMEs
Julián David González Zapata, Department of Industrial and Systems Engineering, Universidad Nacional de Colombia, Bogotá D.C. Colombia
Bertha Viviana Ruales Guzmán, Instituto de Ciencia y Tecnología de Alimentos, Universidad Nacional de Colombia, Bogotá D.C. Colombia
Angelo Cavallo, Instituto de Ciencia y Tecnología de Alimentos, Politecnico di Milano, Milano, Italia

August 6, 2026 (Thursday) - Session: 15:00 – 17:00

15:00 – 17:00, Thursday **Onsite Room 5 (Learning Vila)**

Session Chair: Hernando Garzón Saenz, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia

Case Studies and Simulation

ID 28 Characterization of Operations Management in Servuction Systems from a Sectorial Approach: Port Services Case Study
Hernando Garzón Saenz, CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
Andrés Redchuk, ETSII. Department of Computer Sciences. University Rey Juan Carlos, Director of Operational Excellence and Process Improvement Institute, Madrid. Spain
José Manuel Solana Garzón, CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias - Colombia

ID 197 Improvement of Equipment Availability Through Focused Improvement and Autonomous Maintenance in a Plastic Preform Manufacturing Company
María Gabriela Mujica Carpio, Gabriela Luciana Meiggs Pardave, Manuel Fernando Montoya Ramirez and Carlos Medardo Urbina Rivera, Carrera de Ingeniería Industrial, Universidad de Lima, Lima-Perú

ID 198 A Partition-Based Scheduling Model for the Panama Canal
Gina Villafañe-Guerrero and James H. Bookbinder, University of Waterloo, Department of Management Science and Engineering, Waterloo, ON, Canada

Virtual - Day 1 (Tuesday, August 4)

August 4, 2026 (Tuesday) - Session: 8:00 – 10:00

8:00 – 10:00, Tuesday **Virtual Zoom Room**

Session Chair: Dr. Mizanur Rahman, IEOM Australia

Undergraduate Student Paper Competition sponsored by Siemens

ID 32 A Meta Synthesis of Key Behavioral Indicators Aligned with Shingo Model Principles and Industry 5.0 Pillars
Lori Balderas Espino Barros, Tessa Valentina Ramírez Castro, Ania Aurora Treviño, Fernando González Aleu González and Luz María Valdez de la Rosa, School of Engineering and Technology, Universidad de Monterrey, San Pedro Garza García, México
Edgar M. A. Granda Gutiérrez, Graduate School, Universidad de Monterrey, San Pedro Garza García, México

Undergraduate Research Competition sponsored by Daikin Applied - Online

ID 123 Print Parameter Optimization of CF-PLA Composites for Aerospace Applications using AI
Abu Huraira Atta Ullah, Industrial and Manufacturing Engineering, University of Engineering and Technology, Lahore, Pakistan
Muhammad Abdullah Tahir, Mechanical Engineering Department, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, Swabi, Pakistan
Hassam Ur Rehman, NUST School of Mechanical and Manufacturing Engineering, Islamabad, Pakistan
Anjum Ali, Former Professor of EE, FAST-NU, Lahore, Pakistan, Former Professor, ECE, KICS, UET, Lahore, Pakistan, Former Associate Professor of EE, Mercer University, MACON, GA, USA and Former Associate Professor of CSE, LUMS, Lahore, Pakistan

Doctoral Dissertation Competition sponsored by Airbus

ID 29 An Integrated Framework for Last-Mile Delivery Optimization Using Reinforcement Learning and Social Media-Based Traffic Prediction in Underdeveloped Megacities
Vasanth Bhat, Luis Rabelo, and Valeria Laynes, University of Central Florida, Orlando, FL 32816, USA
Edgar Gutierrez-Franco, Universidad Externado de Colombia, Bogotá, Colombia
Marwen Elkamel and Juan Zamora-Aguas, University of Central Florida, Orlando, FL 32816, USA

Graduate Student Paper Competition Sponsored by EATON Corporation – Online

ID 36 Towards Agriculture 4.0 in Open Farming - EDEN Project for Hop Cultivation
Thiago Godoi de Arruda, Maria das Graças J. M. Tomazela, and Silvia Pierre Irazusta, Faculty of Technology (FATEC), Sorocaba, São Paulo, Brazil
Daniel Ribeiro de Sousa, São Paulo State University (UNESP), Bauru, São Paulo, Brazil
Felipe Ramos, and Vitor Mendes Caldana, Federal Institute of São Paulo (IFSP), Sorocaba, São Paulo, Brazil

High School Competition – Online

ID 6 Bacterial Cellulose Based Scaffolds for Controlled Oxygen Delivery in Low-Resource Regions High School STEM Competition
Aarna Dwivedi and Goutham Koppolu, Independent Researchers, United States

ID 176 StudentLink-Texas: A Centralized Digital Platform for Improving High School Students' Access to Internship, Volunteer, and Enrichment Opportunities — A Pilot Study on Awareness and Usability
Sahana Thamizhan, Coppell High School, Coppell, TX, USA

Simulation Competition - Online

ID 43 Omnichannel: Customer Focused Experience
Guilherme Coli, João Vitor Pereira, Maria Clara da Silva Nogueira, Maria Eduarda Ferreira and Mariana Alves Cabral, Students, Production Engineering, FACENS University Center, Sorocaba, Brazil
Evelyn Amanda de Abreu Lopes Ramos, Professor and Advisor, Production Engineering, FACENS University Center, Sorocaba, Brazil

ID 126 Concurso de simulación
Dixia Contrera Bejerano, Estudiante, Panama

Supply Chain and Logistics Competition sponsored by aThingz

ID 19 Optimization of Transport and Logistics Systems Using Data Analysis in Kazakhstan
Adeliya Tyulyubayeva, Binom naed by Abish Kekilbayev, Kazakhstan

ID 167 Application of Lean Warehousing Tools to Improve OTIF in an Automotive Company
Gean-Piero Ortiz-Davalos, Will-Arthuro Calla- Miranda- and Edilberto-Miguel Avalos-Ortecho, and José Taquía Gutierrez, Faculty of Engineering and Architecture, University of Lima, Lima, Peru

August 4, 2026 (Tuesday) - Session: 10:00 – 12:00

10:00 – 12:00, Tuesday **Virtual Zoom Room**

Session Chair: Eddie Tapiero, Economist, Panama City, Panama
Zoom Host: Siyam Hasan, IEM, KUET, Khulna, Bangladesh

Supply Chain and Logistics

ID 73 AI-Enabled Digital Twins for Low-Carbon Logistics Network Planning: A Simulation-Based Optimization Framework
Halima Akter Rube, Global Logistics Systems & Trade, Compliance Specialist, ARGO HYTOS US, 1835 Research Drive, Bowling Green Bowling Green, Ohio, USA
Md Ashiquzzaman Pavel, Graduate Teaching Assistant, School Of Engineering, Bowling Green State University, Technology Building, Bowling Green, OH, United States

ID 87 Strategic Management of Operational Trade-offs in Optimizing the Reverse Flow of Logistical Exceptions
Jayla Fé Dias, Undergraduate Student, Department of Industrial Engineering, Virtual University of the State of São Paulo (UNIVESP), Santa Barbara D´ Oeste, São Paulo, Brazil

ID 102 A Gate-Based Release Management Framework for Multi-Site Robotic System Deployment
Livia Silveira Bezerra de Menezes, Efficient Plant Inc. (EPI), Laval, Quebec, Canada

ID 125 Optimization of Inbound Transportation through a Multi-Origin Heterogeneous VRP Model Using Milk-Run Routes in the Automotive Industry
Sara Bolaños Ledesma, Master in Logistic and Supply Chain Management, Universidad Popular Autónoma del Estado de Puebla, Puebla, Pue. México
Diana Sànchez Partida, Dean of the School of Industrial, Logistics, Manufacturing, and Automotive Studies, Universidad Popular Autónoma del Estado de Puebla, Puebla, Pue. México

ID 164 From Efficiency to Resilience in Maritime Transport Systems: A MAPA-Based Framework for Explaining Why the Freight Rate Is No Longer the Cost of Transportation
Eddie Tapiero, Economist, Panama City, Panama

August 4, 2026 (Tuesday) - Session: 12:00 – 14:00

12:00 – 14:00, Tuesday **Virtual Zoom Room**

Session Chair: Kirandeep Virdi, New York University, New York, NY, USA
Zoom Host: Aqib Islam, IEOM Bangladesh

Business Management and Operations Management

ID 121 The Role of Artificial Intelligence in Enhancing Organisational Efficiency within the South African Telecommunications Landscape
Polycarpe Feussi, Senior Lecturer in Commerce and Research at Eduvos University College. Republic of South Africa

ID 128 The AI Budget Paradox: A Tiered Access and Proficiency Framework for Sustainable Enterprise AI Adoption
Kirandeep Virdi, New York University, New York, NY, USA
Sergio Mastrogiovanni, New York University, New York, NY, USA
IAE Business School, Buenos Aires, Argentina

ID 129 The Moderating Role of Brand Love on the Relationship of Brand Loyalty and Brand Authenticity, Brand Personality, and Brand Engagement: Using Structural Equation Modelling in Fashion Industry
Evo Sampetua Hariandja, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
John Tampil Purba, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
Yokie Radnan Kristiyono, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia

ID 130 Digital Banking Agility and Customer Digital Literacy on Reuse Intention: A Serial Mediation of Trust, Customer Experience, and Satisfaction Among Indonesian State-Owned Bank (Himbara) Customers
Yokie Radnan Kristiyono, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
John Tampil Purba, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
Evo Sampetua Hariandja, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia

ID 131 Technological Immersion and Purchase Intention in Live Commerce: The Mediating Roles of Flow Experience and Utilitarian Value
John Tampil Purba and Julita Grace, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
Evo Sampetua Hariandja, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
Yokie Radnan Kristiyono, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia

ID 132 Antecedents and Outcomes of Perceived Green Corporate Social Responsibility Authenticity in the Indonesian Natural Cosmetics Industry: The Moderating Role of the Halal Label

Evo Sampetua Hariandja, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Banten, Indonesia
John Tampil Purba, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Banten, Indonesia

ID 133 Customer Experience as a Strategic Driver of Buying Intention: The Influence of Service Quality and Brand Equity in CHAGEE's Market Context
John Tampil Purba and C. Victoria S., Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia
Evo Sampetua Hariandja, Department of Management, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia

ID 142 Customer Beliefs in Green Dynamic Capabilities: Impact on Brand Activism and Innovative Value in the Hospitality Sector
Evo Sampetua Hariandja, Jessica Zein, Nels Giorgio Archangelo, Gst. Muhamad Satriadi and Maura Revalina Suganda, Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia

August 4, 2026 (Tuesday) - Session: 14:00 – 16:00

14:00 – 16:00, Tuesday **Virtual Zoom Room**

Session Chair: Razakh Aruzhan Nurlankyzy, Intellectual School of Science and Mathematical Direction of Nauryzbay District, Kazakhstan
Zoom Host: Dr. Nazrul, IEOM Canada

Sustainability, Green Systems and Energy

ID 24 Obtaining freshwater from saline water
Razakh Aruzhan Nurlankyzy and Shakanova Aizere Arynovna, Branch of the Nazarbayev Intellectual School of Science and Mathematical Direction of Nauryzbay District, Almaty City, Kazakhstan

ID 79 Sustainable Water Quality Monitoring through Real-Time IoT-Based Supervision Using Arduino in Areas Surrounding Mining Centers
Rosa Sanchez, Universidad Nacional Tecnologica de Lima Sur Lima City, Peru
Jhensin Diaz, Universidad Nacional Tecnologica de Lima Sur Lima City, Peru
Dante Manrique, Universidad Nacional Tecnologica de Lima Sur Lima City, Peru
Mariela Mamani, Universidad Nacional Tecnologica de Lima Sur Lima City, Peru
Mario Chauca, Universidad Nacional Tecnologica de Lima Sur Lima City, Peru

ID 162 Energy Communities in Mexico: Challenges, Opportunities and a Governance Model for the Energy Transition
Jessica Aimeé Gómez Qiroz, María del Rocío Soto Flores and Ingrid Yadibel Cuevas Zuñiga, Instituto Politécnico Nacional, Mexico City, Mexico

ID 179 Assessment of the Impacts of the Circular Economy in the South African Construction Industry: Professionals' Perspective
Thabo Khafiso, Department of Construction Management and Quantity Surveying, Faculty of Engineering and Built Environment, Durban University of Technology, KwaZulu-Natal, South Africa
Sizolwakhe Mtetwa, Department of Building Sciences, Faculty of Engineering and Built Environment, Tshwane University of Technology, Gauteng, South Africa
Scelo Mhlongo, Department of Construction Management and Quantity Surveying, Faculty of Engineering and Built Environment, Durban University of Technology, KwaZulu-Natal, South Africa

ID 180 Barriers to the Adoption of the Circular Economy in South Africa's Construction Industry
Thabo Khafiso, Department of Construction Management and Quantity Surveying, Faculty of Engineering and Built Environment, Durban University of Technology, KwaZulu-Natal, South Africa
Sizolwakhe Mtetwa, Department of Building Sciences, Faculty of Engineering and Built Environment, Tshwane University of Technology, Gauteng, South Africa
Scelo Mhlongo, Department of Construction Management and Quantity Surveying, Faculty of Engineering and Built Environment, Durban University of Technology, KwaZulu-Natal, South Africa

ID 181 Pathways to Circular Transformation: Rethinking Construction Industry Practices in Emerging Economies
Sizolwakhe Mtetwa, Thabo Khafiso and Scelo Mhlongo, Department of Building Sciences, Tshwane University of Technology, Pretoria, South Africa

ID 182 Exploring Barriers To The Adoption Of Modern Methods Of Construction (Mmc) In The Construction Industry: Bibliometric Analysis
Thabo Khafiso and Nthethele Thakhisi, Department of Construction Management and Quantity Surveying, Durban University of Technology, KwaZulu-Natal, South Africa

Virtual - Day 2 (Wednesday, August 5)

August 5, 2026 (Wednesday) - Session: 8:00 – 10:00

8:00 – 10:00, Wednesday **Virtual Zoom Room**

Session Chair: Patrick Pierre, Université du Québec à Montréal (UQAM), Montréal, Canada
Zoom Host: Dr. Mizanur Rahman, IEOM Australia

Artificial Intelligence and Data Science - Online

ID 124 Modeling and implementation of an SMA with simulation of data from IoT
Patrick Pierre, Roger Nkambou, Pierre Poirier, Lorry James Encarnacion and Gerançon Bruel, Department of Computer Science, Université du Québec à Montréal (UQAM), Montréal, Canada

ID 20 Improvement Model to Reduce Lead Times for Complete Deliveries in a Print Shop Applying SMED, Preventive Maintenance, and SW
Diego Alejandro Alva Gallardo y Luis Enrique Hidetoshi Nakandakari Bravo, Universidad de Lima, Faculty of Engineering, Lima, Peru
Carlos Alberto Galvez Zarate y Paul Angello Daniel Sanchez Soto, Universidad de Lima, Faculty of Engineering, Lima, Peru

ID 34 Design of a pilot plant for the manufacture of Organic Semiconductor Films in Ecuador
Gabriela Joseth Serrano Torres, Facultad de Ingeniería, Universidad Anáhuac México, Av. Universidad Anáhuac 46, Col. Lomas Anáhuac, Huixquilucan 52786, Estado de México, México
Facultad de Ingeniería, Universidad Nacional de Chimborazo, Av. Antonio José de Sucre Km 1 ½ vía a Guano, Riobamba, Ecuador
María Elena Sánchez Vergara, Facultad de Ingeniería, Universidad Anáhuac México, Av. Universidad Anáhuac 46, Col. Lomas Anáhuac, Huixquilucan 52786, Estado de México, México
Universidad Tecnológica Fidel Velázquez, Emiliano Zapata S/N, Col. El Trafico, Nicolás Romero 54400, Estado de México, México

ID 165 Dynamic Distance Tracking Using Ultrasonic Sensor, MicroBlaze FPGA, and Node-RED for IoT Applications in Industry 4.0
Federico Fernández and Miguel Díaz, Facultad Politécnica – Universidad Nacional de Asunción, San Lorenzo, Paraguay

August 5, 2026 (Wednesday) - Session: 10:00 – 12:00

10:00 – 12:00, Wednesday **Virtual Zoom Room**

Session Chair: Arrisa Srimala, Systems Engineering Program, Suranaree University of Technology, Nakhon Ratchasima, Thailand
Zoom Host: Siyam Hasan, IEM, KUET, Khulna, Bangladesh

Lean Six Sigma and Operations Excellence

ID 5 A Lean Six Sigma and SPC-Based Evaluation of Autoclave Sterilization Process Capability in Healthcare Systems
Ivanhoe Rozo-Rojas, María Alejandra Jaimes-Quintanilla and Sergio Andrés Zabala-Vargas, Professor, Industrial Engineering, Corporación Universitaria Minuto de Dios, Bogotá, Colombia

ID 21 Model for Improving Availability through TPM and SMED in a Plastic Packaging Company
Hector Alexander Gomez Frías and Luis Adrian Martinez Chininin, Universidad de Lima, Industrial Engineering degree, Lima, Perú
Carlos Alberto Galvez Zarate and Paul Angello Daniel Sanchez Soto, Universidad de Lima, Industrial Engineering degree, Lima, Perú

ID 45 An AHP-Driven Framework for Supplier Service Quality Assessment and Performance Ranking
Mohammed Al Awadh, Department of Industrial Engineering, King Khalid University Abha, 64231, Saudi Arabia

ID 89 Digitalization of Preventive Maintenance Management for Plastic Injection Molds
Arrisa Srimala, Systems Engineering Program, Institute of Engineering, Suranaree University of Technology, Nakhon Ratchasima, Thailand
Natdanai Chanlawong, Ph.D., Lecturer, School of Industrial Engineering, Suranaree University of Technology, Nakhon Ratchasima, Thailand

August 5, 2026 (Wednesday) - Session: 12:00 – 14:00

12:00 – 14:00, Wednesday **Virtual Zoom Room**

Session Chair: Chu-Lun Hsieh, National Taichung University of Science and Technology, Taichung 404, Taiwan
Zoom Host: Aqib Islam, IEOM Bangladesh

Engineering Management and Project Management

ID 97 Improvement Proposal to Reduce Preventive Maintenance Time of Electric Hoists Using 5S and Standardized Work
Juan Machuca, Faculty of Engineering and Architecture — Industrial Engineering Program, Universidad de Lima, Lima, Peru
Luis Consuero and Ricardo Contreras, Faculty of Engineering and Architecture — Industrial Engineering Program, Universidad de Lima, Lima, Peru

ID 103 A Phased Validation and Rollout Framework for Multi-Site Autonomous Warehouse Robotic Systems: From Single-Site Validation **to Network Scale**
Livia Silveira Bezerra de Menezes, Efficient Plant Inc. (EPI), Laval, Quebec, Canada

ID 148 The Effect of Working Memory Capacity and Mental Workload on Students' Encoding Performance
Charls Darriel B. Casquejo, Department of Industrial Engineering, Visayas State University Isabel, Isabel, Leyte, Philippines
Darry Mhei L. Morales, Department of Industrial Engineering, Director, Research, Extension, and Innovation, Visayas State University Isabel Isabel, Leyte, Philippines

ID 163 The Role of IS Performance in Consolidated Financial Reporting and Internal Control
Chu-Lun Hsieh, Department of Accounting Information, National Taichung University of Science and Technology, Taichung 404, Taiwan
Wen-Hsien Tsai, Department of Business Administration, National Central University, Jhongli, Taoyuan 32001, Taiwan

August 5, 2026 (Wednesday) - Session: 14:00 – 16:00

14:00 – 16:00, Wednesday **Virtual Zoom Room**

Session Chair: Ginamaria García Garcés, Universidad Católica Boliviana San Pablo, Cochabamba, Bolivia
Zoom Host: Dr. Nazrul, IEOM Canada

Data Analytics and AI

ID 120 Data-Driven Decision Support for Central Bank Operations: Machine Learning and Structural Break Analysis for Inflation Forecasting — A Bolivian Case Study (1980–2026)
Ginamaria García Garcés, Director of the Industrial Engineering Program, Universidad Católica Boliviana San Pablo, Cochabamba, Bolivia

Virtual - Day 3 (Thursday, August 6)

August 6, 2026 (Thursday) - Session: 8:00 – 10:00

8:00 – 10:00, Thursday **Virtual Zoom Room**

Session Chair: Didier Jamir, UNAD, Colombia
Zoom Host: Mizanur Rahman, IEOM Australia

Case Studies and Best Practices

ID 1 Reflection on productivity and work performance under the teleworking modality
Yésica P. Oviedo Céspedes and Yeny A. García Garzón, Universidad Nacional Abierta Y Adistancia -Unad, Colombia

ID 3 Metodología General Ajustada para el deporte y la Integración Comunitaria en La Plata, Huila
Didier Jamir and Gutierez Ramirez, UNAD, Colombia

ID 18 Improvement of Equipment Availability Through Focused Improvement and Autonomous Maintenance in a Plastic Preform Manufacturing Company
María Gabriela Mujica Carpio, Gabriela Luciana Meiggs Pardave, Manuel Fernando Montoya Ramirez and Carlos Medardo Urbina Rivera, Carrera de Ingeniería Industrial, Universidad de Lima, Lima-Perú

ID 122 Improving Productivity at a Small Footwear Manufacturing Business Through Work Standardization an DDMRP
Nicole Morelia Barrios-Lizonde, Sofía Stefany Pastor-Bayes, José Antonio Taquía-Gutiérrez and Juan Carlos Quiroz-Flores, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru

August 6, 2026 (Thursday) - Session: 10:00 – 12:00

10:00 – 12:00, Thursday **Virtual Zoom Room**

Session Chair: Livia Silveira Bezerra de Menezes, Efficient Plant Inc. (EPI), Laval, Quebec, Canada
Zoom Host: Siyam Hasan, IEM, KUET, Khulna, Bangladesh

Quality, Reliability and Maintenance

ID 101 End-of-Arm Tooling Adaptation for Variable-Profile Distribution: Engineering a Beverage Logistics Solution
Livia Silveira Bezerra de Menezes, Efficient Plant Inc. (EPI), Laval, Quebec, Canada

ID 104 A Framework for Vision-Based Obstruction Detection in High-Density Robotic Warehouse Systems: Design Principles and Deployment Outcomes
Livia Silveira Bezerra de Menezes, Efficient Plant Inc. (EPI), Laval, Quebec, Canada

ID 78 Measures to Improve the Adoption of Digital Mentorship in the South African Construction Industry: A Literature Review
Thaga Moretsele, Morena William Nkomo, Letsau Maphutha and Sidumisile Siziba, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environmrnt, University of Johannesburg South Africa

ID 177 The Relationship Between an ISO 17025:2017 Accredited Laboratory And Operational Performance: A Case Of Perishable Product Export Control Board (PPECB) Testing Laboratory
Gcinumuzi Zimu, Master of Philosophy in Quality Management Student, Department Of Operations and Quality Management – Faculty of Management Sciences, Durban University of Technology, Durban, South Africa
Shalini Singh, Associate Professor, Department of Operations and Quality Management – Faculty of Management Sciences, Durban University of Technology, Durban, South Africa
Anisha Ananth, HoD Department of Statistics, Department of Statistics, Durban University of Technology, Durban, South Africa

August 6, 2026 (Thursday) - Session: 12:00 – 14:00

12:00 – 14:00, Thursday **Virtual Zoom Room**

Session Chair: Kevin Gonzalez, Universidad Tecnologica de Panama, Panama
Zoom Host: Aqib Islam, IEOM Bangladesh

Computer Science Track

ID 77 An Event-Aware Multi-Agent Digital Twin for Evaluating Geopolitical Port Disruptions: The U.S.-China Strategic Rivalry at the Panama Canal
Manikandan Chandran, Independent Researcher, United States

ID 119 Semantic Analysis of Eco-Innovation Research in Manufacturing SMEs Using Embeddings and Unsupervised Learning
Cristian Rincón Guio, Corporación Universitaria Minuto de Dios – UNIMINUTO, Colombia

ID 135 An AI-Assisted Multimodal Framework for Hepatocellular Carcinoma Prediction and Tumor Grading Using ANP-Based Biomarker Prioritization And MRI/CT Image Analysis
Amala Maria Kuruvilla, Department of Mechanical Engineering, Rajiv Gandhi Institute of Technology, Kottayam, Kerala, India
Dr. K. Sunil Kumar, Professor, Department of Mechanical Engineering, Rajiv Gandhi Institute of Technology (Government of Kerala), Kottayam, Kerala, India
Dr Shabeerali T. U., Senior Consultant, HPB and Liver Transplant, KIMSHEALTH, Thiruvananthapuram, Kerala, India

ID 137 Agile Ontology Engineering for Educational Knowledge Graphs: Lessons from a Resource-Constrained NGO Deployment
Kevin Gonzalez, Universidad Tecnologica de Panama, Panama

ID 168 Design of a Hybrid Quantum-Classical Model for Encrypted Data Multiplication to Preserve Security
Lauro Enciso Rodas and Karla Catherine Rojas Pedraza, Universidad Nacional de San Antonio Abad del Cusco, Cusco, Perú

August 6, 2026 (Thursday) - Session: 12:00 – 14:00

12:00 – 14:00, Thursday **Virtual Zoom Room**

Session Chair: Dr. Mario Chauca, Lima, Peru
Zoom Host: Dr. Nazrul, IEOM Canada

Entrepreneurship and Innovation

ID 176 StudentLink-Texas: A Centralized Digital Platform for Improving High School Students' Access to Internship, Volunteer, and Enrichment Opportunities — A Pilot Study on Awareness and Usability
Sahana Thamizhan, Coppell High School, Coppell, TX, USA



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7. University of Bahrain

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9. Bangladesh Institute of Management (BIM)
10. Bangladesh University of Textiles (BUTEX)
11. BUET
12. CUET
13. Daffodil International University (DIU)
14. DUET, Gazipur
15. European University of Bangladesh
16. International Islamic University of Chittagong
17. IUBAT
18. Jessore University of Science and Technology
19. Khulna University (KU)
20. Khulna University of Eng and Tech (KUET)
21. Military Institute of Science and Technology
22. National Institute of Textile Eng &Res (NITER)
23. Rajshahi University (RU)
24. SUST
25. University of Chittagong
26. World University Bangladesh (WUB)
27. BAUST
28. American International University-Bangladesh (AIUB)
29. BGMEA University of Fashion and Technology (BUFT)
30. IUB – Independent University, Bangladesh

Bolivia
31. Universidad Católica Boliviana

Botswana
32. University of Botswana

Brazil
33. Federal University of Sao Carlos (UFSCar)
34. Federal University of Santa Catarina (UFSC)
35. University of Sao Paulo (USP) – Sao Carlos
36. Federal Institute of Sao Paulo, Sorocaba
37. FACENS University, Sorocaba

Canada
38. Concordia University
39. Humber Institute of Tech and Adv Learning
40. Polytechnic Montreal
41. University of New Brunswick at Fredericton
42. University of Waterloo
43. University of Windsor
44. Wilfrid Laurier University

Colombia
45. Fundación Univ. Tecn. Comfenalco, Cartagena, Bolívar
46. University of Rosario, Bogota
47. University of Quindio
48. Universidad de San Buenaventura, Cali, Valle
49. Institución Universitaria Colegios de Colombia
50. Escuela Colombiana de Ingeniería Julio Garavito
51. Universidad Católica de Colombia
52. Universidad Santo Tomás de Aquino
53. Fundación Universitaria Internacional de La Rioja
54. Universidad América
55. Universidad Militar Nueva Granada (UMNG)
56. Universidad Cooperativa de Colombia (UCC)
57. Universidad del Norte
58. Corporación Universitaria Minuto de Dios – UNIMINUTO
59. Fundación Universitaria de Popayán
60. Universidad Nacional Abierta y a Distancia (UNAD)

Costa Rica
61. University of Costa Rica

Czech Republic
62. University of West Bohemia, Pilsen

Ecuador
63. Technical University of Ambato
64. Universidad San Francisco de Quito

Egypt
65. Zagazig University
66. Fayoum University
67. British University in Egypt

El Salvador
68. Escuela Superior de Economía y Negocios (ESEN), El Salvador

Ethiopia
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70. Addis Ababa University Institute of Technology
71. Mekelle University

Finland
72. University of Vaasa

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75. Technical University Applied Sciences Augsburg

Ghana
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77. Ho Technical University
78. University of Ghana

Greece
79. Accra Technical University

Haiti
80. Université Quisqueya

India
81. College of Eng and Tech, Bhubaneswar, Odisha, India
82. College of Engineering Guindy, Chennai
83. Guru Nanak Dev Engineering College
84. Pandit Dendayal Petroleum Univ., Gujrat
85. P.D.A. College of Engineering, Gulbarga
86. Vellore Institute of Technology
87. Vidya Jyothi Institute of Technology, Hyderabad
88. Universal College of Eng & Tech (UCET), Guntur
89. National Institute of Technology (NIT), Warangal
90. Jawaharlal Nehru Technological University Hyderabad
91. IITS, India
92. Birla Institute of Tech & Sciences (BITS Pilani)
93. Amrita School of Business – Bangalore
94. Amrita school of Arts and Sciences, Mysuru
95. Amrita School of Business, Coimbatore
96. Aligarh Muslim University, Aligarh
97. Mahant Bachittar Singh College Eng & Tech, Jammu
98. Baba Banda Singh Bahadur Eng College
99. Ramaiah University of Applied Sciences
100. Nawab Shah Alam Khan College Eng & Tech (NSAKCET
101. Global Institute Of Eng and Technology, Hyderabad
102. VNR Vignana Jyothi Institute of Eng and Technology
103. Siddhartha Institute of Engineering & Technology
104. Osmania University – The University College of Eng
105. VJTI Mumbai – Veermata Jijabai Technologic. Institute
106. BML Munjal University, Gurugram, India
107. AKTU University, Kanpur, India
108. Mufakkhamjah College of Eng. and Tech, Hyderabad
109. Methodist College of Engineering and Technology
110. Vardhaman College of Engineering
111. Dr B R Ambedkar National Institute of Technology, Jalandhar
112. B. V. Raju Institute of Technology, Vishnupur, Narsapur
113. Anjuman College of Engineering and Technology
114. Bharatiya Eng. Science & Technology Innovation University, (BESTIU), Gownivaripalli, Gorantla, Andhra Pradesh
115. HITAM - Hyderabad Institute of Technology and Management
116. JNTUH University College of Management Hyderabad, JNTUH
117. Siddaganga Institute of Technology, Tumakuru, Karnataka

Indonesia
118. Atma Jaya Catholic University
119. Bina Nusantara University (Binus), Indonesia
120. Institut Teknologi Bandung
121. Institut Teknologi Sepuluh Nopember (ITS)
122. Sampoerna University, Jakarta
123. Shipbuilding Institute of Polytechnic Surabaya
124. Tarumanagara University
125. UIN Sultan Syarif Kasim, Riau
126. Universitas Diponegoro (Undip)
127. Universitas Gadjah Mada (UGM)
128. Universitas Iqra Buru
129. UIN Sunan Kalijaga, Yogyakarta
130. Universitas Islam Negeri Alauddin Makassar
131. Universitas Sebelas Maret (UNS), Surakarta
132. University of Indonesia
133. Universitas Sumatera, Utara Medan
134. Narotama University, Surabaya
135. Universitas Pakuan, Bogor
136. Trilogi University
137. Universitas Muhammadiyah Riau
138. Universitas Muhammadiyah Palembang
139. Universitas Putera Batam, Kepulauan Riau

Ireland
140. Atlantic Technological University

Iran
141. MehrAstan University, Guilan
142. University of Eyvanekey
143. Technical and Vocational University (TVU)
144. University of Tehran

Iraq
145. Babylon University

Israel
146. Sapir Academic College
147. Shamoon College of Engineering (SCE), Ashdod

Italy
148. University of Bologna
149. University of Salento

Japan
150. Ashikaga University
151. Gunma University

Jordan
152. Hashemite University

Kenya
153. Kenyatta University, Nairobi

Kuwait
154. Gulf University of Science and Technology

Libya
155. Libyan Academy

Malaysia
156. Universiti Malaysia Sabah (UMS)
157. Universiti Putra Malaysia (UPM)
158. Universiti Teknologi Malaysia (UTM)
159. Universiti Tun Hussein Onn Malaysia (UTHM)
160. Universiti Utara Malaysia (UUM)
161. University of Malay (UM)

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Mexico
162. Instituto Politécnico Nacional (IPN), Mexico
163. Universidad del Caribe, Cancun
164. Tecnológico de Monterrey, Campus Monterrey
165. Universidad Industrial de Santander
166. Universidad Iberoamericana
167. Universidad de Guanajuato
168. UJED, Mexico (#297)

Morocco
169. Akhawayn University
170. Ecole Mohammadia d'Ingénieurs (EMI)
171. Sidi Mohamed Ben Abdellah University of Fez
172. N. School of Appl Sci. Kenitra, Ibn Tofail Univ
173. Ecole Supérieure De Technologie, Fez
174. INPT

Mozambique
175. Eduardo Mondlane University

Namibia
176. National Univ. of Sci. and Tech. in Windhoek

Nepal
177. Kathmandu University
178. Tribhuvan University

Nigeria
179. Covenant University
180. University of Ibadan
181. University of Nigeria, Nsukka
182. University of Benin
183. Olabisi Onabanjo University

Oman
184. SQU - Sultan Qaboos University
185. MEC - Middle East College
186. GCET – Global College of Engineering and Technology

Pakistan
187. Dawood University of Eng and Technology, Karachi
188. Government College University Faisalabad
189. Mehran University of Eng and Tech, Jamshoro, Sindh
190. Riphah International University, Lahore Campus
191. University of Engineering and Technology, Lahore
192. UOT – Nowshera
193. Information Technology Univ. of the Punjab, Lahore
194. Sindh Institute of Management & Technology (SIMT), Karachi
195. NED University of Engineering & Technology, Karachi

Panama
196. Quality Leadership University (QLU) - #298
197. ULatina

Papua New Guinea
198. Papua New Guinea University of Technology

Paraguay
199. National University of Asuncion
200. Universidad del Cono Sur de las Américas
201. Colegio Técnico Nacional, Asuncioón

Peru
202. National Univ of San Antonio Abad, Cusco
203. Universidad de Lima (ULima)
204. Universidad Peruana de Ciencias Aplicadas (UPC)
205. Universidad Ricardo Palma (URP)
206. Pontificia Universidad Católica del Perú (PUCP)
207. Universidad Privada del Norte (UPN)
208. Universidad Continental (UContinental)
209. Universidad de Ingeniería y Tecnología (UTEC)
210. Universidad Nacional de Ingeniería (UNI)
211. University of San Martin de Porres (USMP)
212. Universidad Nacional Tecnológica de Lima Sur
213. Universidad Nacional de San Agustín de Arequipa

Philippines
214. Bulacan State University, Malolos City, Bulacan
215. LPU Laguna
216. Mapua University
217. De La Salle University (DLSU) Manila
218. Adamson University
219. CEBU Technological University
220. University of San Jose-Recoletos
221. Quezon City University
222. De La Salle Lipa

Portugal
223. ISEL – Instituto Superior De Engenharia de Lisboa
224. FCT NOVA

Puerto Rico
225. Polytechnic University of Puerto Rico

Qatar
226. Qatar University
227. Hamad bin Khalifa University, Doha

Saudi Arabia
228. Alfaisal University
229. Effat University
230. King Abdulaziz University (KAU)
231. King Abdulaziz University, Rabigh
232. King Fahd University of Petroleum and Minerals (KFUPM)
233. King Khalid University, Abha
234. King Saud University (KSU)
235. Umm Al-Qura University (UQU)
236. Princess Nourah University (PNU)
237. Prince Sattam Bin Abdulaziz University
238. Prince Sultan University (PSU)
239. Taibah University
240. University of Tabuk
241. Taibah University
242. University of Business and Technology
243. King Khalid University, Abha
244. University of Bisha
245. Taif University
246. Al-Yamamah University
247. Al-Yamamah University, Al Khobar
248. Mustaqbal University
249. AlMaarefa University, Riyadh
250. Islamic University of Madinah

Singapore
251. SUSS

South Africa
252. Durban University of Technology (DUT)
253. Tshwane University of Technology (TUT)
254. University of Johannesburg (UJ)
255. University of South Africa (UNISA)
256. Vaal University of Technology (VUT)
257. CPUT

Sri Lanka
258. University of Kelaniya
259. University of Peradeniya

Sudan
260. Sudan University of Science and Tech Khartoum

Thailand
261. Chulalongkorn University, Bangkok
262. Chiang Mai University

Turkey
263. Turkish-German University
264. Uskudar University

UAE
265. University of Science & Technology of Fujairah

UK
266. University of Derby
267. University of the West of England, Bristol

USA
268. Central Connecticut State University
269. Eastern Michigan University
270. Lawrence Technological University, Michigan
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275. Southern Arkansas University
276. Western Michigan University
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278. Minnesota State University, Mankato
279. Central State University
280. University of Central Florida
281. Minnesota State University, Mankato
282. University of Texas – San Antonio (UTSA)
283. Capitol Technological University
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286. Binghamton University State University of New York City
287. Georgia Tech (# 296)

Venezuela
288. Catholic University Andrés Bello, Caracas

Vietnam
289. CFVG, Ho Chi Minh City, Vietnam

Zambia
290. University of Zambia
291. Copperbelt University
292. Evelyn Hone College

Zimbabwe
293. University of Zimbabwe, Harare
294. National University of Science and Technology
295. Harare Institute of Technology (HIT)
296. Women's University in Africa (WUA)
297. Chinhoyi University of Technology (CUT)

High School Chapters
298. Bay Area of San Francisco & San Jose, CA
299. Arongghata, Khulna, Bangladesh
300. Ironwood High School, Glendale, Arizona, USA
301. E-STEM, Columbus,Ohio

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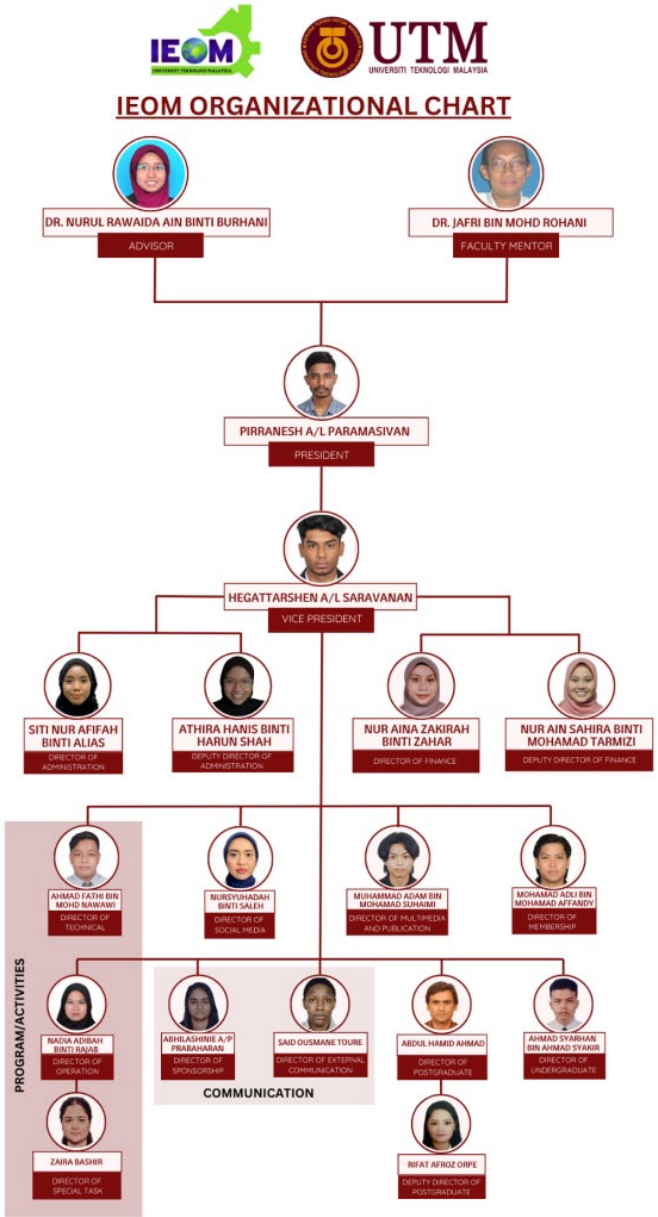

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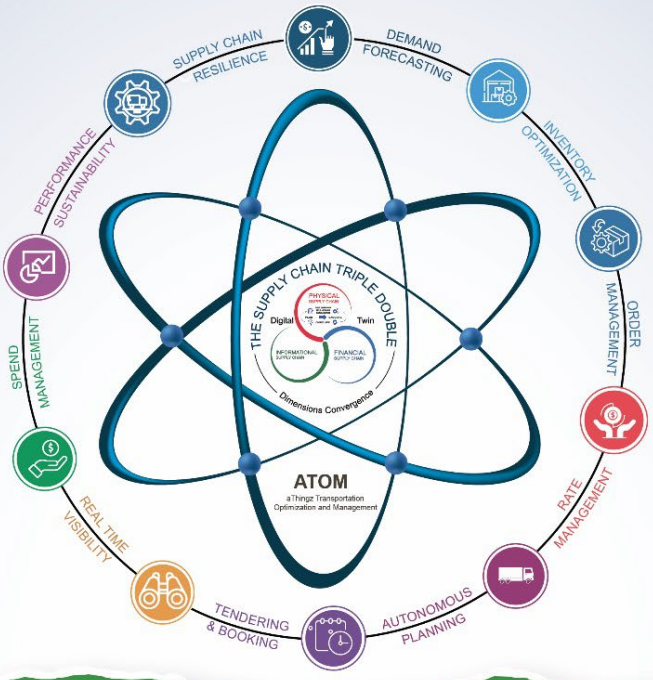



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4rd GCC International Conference on Industrial Engineering & Operations Management

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Host & Venue: University of Qatar



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Venue: UTM Kuala Lumpur Campus



UTM
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8th African Conference on Industrial Engineering & Operations Management

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UNIVERSITY OF GHANA

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Host and Venue: Northeastern University





Northeastern University

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