Special Session Call for Papers for STE 2027

February 24 - 26, 2027, The Sukosol Hotel Bangkok, Thailand

"Digital Twins and Industry 4.0/5.0 Automation for Thailand's Eastern Economic Corridor: Advancing Engineering and IT Education for Smart Industrial Growth (DTIA-EEC)"

as part of the

International Conference on Smart Technologies & Education (STE 2027)

Background and Overview

Thailand's Eastern Economic Corridor (EEC) is the country's flagship platform for advanced manufacturing and digital-economy investment. As EEC industries move toward Industry 4.0 and, increasingly, Industry 5.0 — where human-centric and sustainable production is emphasized alongside automation — demand for digital twin technologies, cyber-physical systems, and AI-enabled process intelligence is growing quickly. This transition depends as much on capable people as on capable machines: engineers, technicians, and IT graduates must be equipped to design, deploy, and maintain these systems on the factory floor.

This Special Session brings together researchers, educators, and industry practitioners working at the intersection of digital twin development, Industry 4.0/5.0 automation, and the engineering/IT education models that prepare the workforce to sustain them. It is grounded in ongoing, practice-based work at the ETAT Training Centers, where student–industry collaborations in the EEC area have already produced deployable outcomes, including an AI-based log-size classification system for a wood-processing partner and a Retrieval-Augmented Generation (RAG) assistant that helps technicians troubleshoot industrial PLC systems. Both illustrate the applied, industry-linked research this session seeks to showcase and expand.

Convened under STE2027's motto of co-creating the smart industrial future through education, the session aims to strengthen the dialogue between EEC industries and the universities supplying their talent pipeline, and to surface transferable engineering/IT education models for regions pursuing similar industrial-transformation agendas.

Topics

Authors are invited to submit complete papers for the DTIA-EEC Special Session (no abstracts needed). The topics cover all aspects of intelligent systems, including but not limited to the following:

- Digital twin modeling and simulation for manufacturing and process industries
- Industry 4.0/5.0 smart automation and cyber-physical systems
- AI-driven predictive maintenance, quality inspection, and process optimization
- Industrial IoT (IIoT) and edge/cloud architectures for smart factories
- PLC, SCADA, and automation-support systems, including AI/RAG-based troubleshooting assistants
- Human–machine interaction, collaborative robotics, and AR/VR in industrial settings
- Engineering and IT curriculum design for Industry 4.0/5.0 competencies
- University–industry collaboration models supporting the EEC (capstone projects, apprenticeships, joint R&D)
- Workforce development, digital-skills training, and vocational education for smart industry
- Sustainable and green automation practices within EEC-based industrial ecosystems
- Other topics related to Digital Twins and Industry 4.0/5.0 Automation

Special Session Chairs

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Special Sessions General Information

Special Sessions, held in parallel with the general conference, are an integral part of the conference. They provide researchers in focused areas the opportunity to meet and present their work and offer a forum for interaction among the broader community of technology-enhanced learning, and online engineering world-wide. Special sessions papers are required to meet the same standards as papers in the general conference and are published in the same conference proceedings.

Special Session papers must be submitted to STE submission server (ConfTool® Submission Server) to the respective Special Session track. Special Session papers will be reviewed by at least two members of the Special Session's Program Committee, and acceptance decisions will be made by the conference program Co-Chairs and Special Sessions Chair.

Important Deadlines

13 Nov 2026	Submission of complete Special Session papers
23 Nov 2026	Notification of acceptance
21 Dec 2026	Camera-ready due & Author registration deadline
24 Feb 2027	STE 2027 opening

Review/Proceedings

All submissions will undergo a double-blind review process. All accepted and presented papers will be published as STE 2027 Proceedings in Springer's Lecture Notes in Networks and Systems. The books of these series are submitted to ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and Springerlink. Selected award-winning papers will be recommended for publication in international journals.

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