

## Track: "Research and Industry Nexus: Bridging Academia and Practice for Next-Generation Engineering Education"

### TRACK OVERVIEW & RATIONALE

The rapid evolution of generative AI, green technology, and industrial automation requires an unprecedented alignment between academic curricula and industry realities. This track serves as a premier forum to bridge the gap between rigorous academic research and pragmatic industrial insights. By focusing on co-designed curricula, experiential learning, and industry-validated assessments, the track provides actionable frameworks to prepare engineering graduates for immediate, high-impact workforce integration.

#### SPECIAL FOCUS: HOW AI AFFECTS EDUCATION

This year's conference specifically examines the "AI Inflection Point." We seek papers that explore the dual nature of AI as both a tool for empowerment and a challenge to traditional academic integrity. Key areas of impact include:

- » **Foster Collaboration:** Create a synergistic space for university researchers and industry leaders to share empirical data and case studies.
- » **Advance Pedagogy:** Showcase innovative teaching methodologies that incorporate real-world industrial problem-solving into engineering classrooms.
- » **Enhance Employability:** Explore novel assessment frameworks that validate both technical mastery and professional "soft" skills demanded by modern employers.

### IMPORTANT DATES

**June 30, 2026**  
Paper Submission Deadline

**August 15, 2026**  
Notification of Acceptance

**September 15, 2026**  
Camera-Ready Paper Due

### ORGANIZERS

**General Chair**  
**Teerawut Wetatham,**  
Electricity Generating Authority of Thailand

**Special Track Chair**  
**Dr. Amit Kumar,**  
BioAxis FNA Research Centre (P) Ltd

### CALL FOR PAPERS

We invite researchers and industry practitioners to submit original, unpublished work aligning with the scope of this track.

#### High-Trend Topics & Scope

Topics of interest include, but are not limited to, the following contemporary industry-academia themes:

- » **Generative AI & LLMs in Engineering Workforces:** Co-developing university-industry guidelines for the ethical and practical deployment of AI coding assistants (e.g., GitHub Copilot) in professional engineering environments.
- » **Industry 5.0 & Human-Centric Automation:** Curriculum design balancing advanced robotics/automation with human-centric, resilient, and sustainable engineering practices.
- » **Green Tech & Circular Economy Competencies:** Frameworks for embedding environmental sustainability, carbon accounting, and clean-energy practices into legacy engineering programs to meet corporate ESG targets.
- » **Immersive Workforce Upskilling:** Utilizing VR/AR, Digital Twins, and Metaverse environments for high-risk industrial safety training, remote lab instruction, and virtual apprenticeships.
- » **Micro-credentials & Agile Education Ecosystems:** Collaborative frameworks between universities and big tech (e.g., Google, AWS, NVIDIA) for stacked micro-credentials, continuous workplace upskilling, and alternative pathways to professional licensure.

#### Submission Guidelines & IEEE TALE Formatting

- » Full Technical/short Papers (2 to 4 pages): Presenting mature research, empirical evaluations, or large-scale implementation results. Strict maximum of 4 pages. Describing promising ongoing projects, innovative classroom interventions, or industry case studies.
- » Formatting: All submissions must be written in English, follow the IEEE standard two-column conference format (A4), and be submitted as readable PDFs. Papers violating page limits or formatting will be rejected without review. Accepted and presented papers will be submitted for inclusion in the IEEE Xplore® Digital Library.

#### Contact & Inquiries:

For questions regarding the track scope, industrial partnerships, or submission suitability, please contact Track Chair at [amitkr@ieee.org](mailto:amitkr@ieee.org).