



September 24-27, 2024

## The 19<sup>th</sup> International Symposium on Advances in Technology Education (ISATE)

*Evolving Teaching and Learning in the  
Age of Artificial Intelligence and Sustainability*

<https://isate2024.sp.edu.sg/>

### CALL FOR PAPERS (Version: December 8, 2023)

The International Symposium on Advances in Technology Education (ISATE) event started in 2007 as international academic exchange between ten engineering colleges (known as Kosen in Japan) in the Kyushu and Okinawa districts of Japan, and three polytechnics in Singapore. It aimed to enhance the quality of Engineering Education in each participating institution. In 2010, all the other Kosen institutions of Japan joined the symposium under the initiative of the National Institute of Technology (NIT). In 2011, two more polytechnics from Singapore joined this international exchange effort as organizers. In 2013, Nagaoka University of Technology and Toyohashi University of Technology also joined the symposium. Hong Kong Institute of Vocational Education (IVE) of Vocational Training Council (VTC) officially joined to become one of the ISATE organizers in 2017.

**The Main Theme for ISATE 2024 is:**

***Evolving Teaching and Learning in the Age of Artificial Intelligence and Sustainability***

There are 4 subthemes under the main theme, and some topics of interests (not exhaustive) are as shown below:

Subtheme 1: Artificial Intelligence in Teaching & Learning	Subtheme 2: Technology in Education	Subtheme 3: Pedagogical Innovation in Teaching & Learning	Subtheme 4: Stakeholder Engagement in Education
<ul style="list-style-type: none"> <li>• Big Data and Analytics for Teaching Sustainability</li> <li>• Student Performance Dashboard for Self-Directed Learning</li> <li>• AI for Personalized Learning</li> <li>• Education Research in this Subtheme</li> </ul>	<ul style="list-style-type: none"> <li>• Asynchronous Lessons and Experiments</li> <li>• Use of AR/VR/MR in Promoting Learning</li> <li>• Classroom of the Future</li> <li>• Technology to Support Education for Sustainable Development</li> <li>• Education Research in this Subtheme</li> </ul>	<ul style="list-style-type: none"> <li>• Innovative teaching &amp; learning, alternative assessments</li> <li>• Using CDIO Framework in Curriculum Redesign</li> <li>• Teaching &amp; Learning using Generative AI</li> <li>• Motivating &amp; Facilitating Student Learning</li> <li>• Education Research in this Subtheme</li> </ul>	<ul style="list-style-type: none"> <li>• Industry-sponsored projects</li> <li>• Student Internship and / or Faculty Attachment</li> <li>• Industry Co-Creation of Learning Experiences</li> <li>• Multi-Institution Collaborations in Advancing T&amp;L</li> <li>• Education Research in this Subtheme</li> </ul>

## Submission Categories

### Paper Presentations

Only paper presentations will be used for ISATE 2024. There will be NO poster presentations. In addition, only academic papers will be accepted. Authors who wished to present scientific works are respectfully requested to share their works elsewhere. The maximum length for a paper is 6 pages, including references. The paper must be submitted using the prescribe template. In addition, the main author must also submit an Approval Certificate to address the necessary copyright requirements.

### Roundtables

These are informal discussions of a topic proposed by a roundtable facilitator. The goal of a roundtable discussion can be, for example, to generate ideas for a particular problem facing engineering educators or to collaborate on a new advancement within ISATE. Roundtables in ISATE are allocated 90 minutes.

Proposal for roundtable should use the prescribed template, with an Activity Description that describes a topic and outline of the session, with discussion questions. Resources needed for the roundtable must be specified. More details can be found in the template.

### Learning Journeys (within Singapore only)

Learning journeys refers to a series of planned learning experiences that takes place over time and includes various learning aspects and experiences using multiple techniques and platform. Learning journeys are scheduled on Day 4 of ISATE, and participation is entirely OPTIONAL. Proposal for a learning journey should use the prescribed template, with details requested duly completed.

### Workshops (within Singapore only)

hands-on session where participants undertake some activities to gain deeper understanding how the relevant theories are connected with practice. Workshops are scheduled on Day 4 of ISATE, and participation is entirely OPTIONAL. A participation can choose to attend either a Learning Journey or a Workshop. Proposal for a workshop should use the prescribed template, with details requested duly completed.

### Templates

The following are available for download at the ISATE 2024 Website:

- Abstract Submission
- Full Paper Submission
- Approval Certificate
- Roundtable
- Workshop
- Learning Journey

## Review of Abstracts and Full Papers

Authors interested in presenting at ISATE 2024 will be invited to submit his/her abstract proposal at the online symposium platform, using the prescribed abstract template.

For ISATE 2024, only INTERNAL REVIEW will be used, i.e. there will be no peer review. For institutions from Singapore and Finland, the review will be carried within one's own institution using the institution's own internal process with the help of the institution's TPC representative. For institutions from Japan, NIT TPC will coordinate the internal review process. Likewise VTC will coordinate the internal review of all submissions from Hong Kong with the help of the TPC representative for Hong Kong.

Likewise for the full paper submission, INTERNAL REVIEW will be used, and will be handled in the same manner as that for the abstract submission.

(In addition, for the case of polytechnics in Singapore, interested author is encouraged to first seek the approval from one's own institution before submitting the abstract).

## Important Dates and Deadlines

Authors are kindly requested to adhere strictly to the abstract and final full paper deadlines below, as any request for extension will not be accepted. As ISATE 2024 adopts the internal review process, items marked with asterisk (\*) are meant as guidelines only.

For papers, roundtables, workshops and learning journeys:

- Call for Paper: January 17, 2024
- Abstract Submission Due: March 15, 2024
- Abstract Review Outcome: April 15, 2024
- Draft Full Paper Submission Due\*: May 15, 2024
- Draft Full Paper Review Outcome\*: July 15, 2024
- Final Full Paper Submission Due: August 15, 2024
- Roundtable, Workshop & Learning Journey Submission: May 15, 2024
- Roundtable, Workshop & Learning Journey Review Outcome: June 1, 2024

For registration:

- Early Bird Registration: From June 15, 2024 to August 16, 2024
- Normal Registration: From August 17, 2024 to September 15, 2024

Each institution is encouraged to set its own internal deadlines for reviewing their own papers.

## Presenting Your Full Paper

Paper presentations will follow a traditional conference format of multiple, parallel tracks with short presentations (15 minutes, using PowerPoint) followed by Q&A (5 minutes). There is no template for PowerPoint presentations.

We regret to inform that, to promote interactions among participants, online presentation is not available for ISATE 2024. At least one author must register for the symposium before the deadline and attend the symposium in person to present the paper; or the paper will be withdrawn from the program.

Presenting author is requested to check through the program schedule when informed of its availability. Any author, who is not able to present of the scheduled presentation slot, is to inform the ISATE 2024 Secretariat in writing (email) via his/her institution's TPC representative.

### IMPORTANT NOTICE

Due to IT security policy in SP, there is no PC station or laptop in our media rooms for presenters to plug in any USB devices containing their presentation slides. As such we require all presenters to send, via the respective TPC representative, the final version of the PowerPoints slides for his/her presentation, **before September 20, 2024** (Friday).

## Enquiry

Any enquiry can be directed to the ISATE Secretariat at [ISATE\\_2024\\_Secretariat@sp.edu.sg](mailto:ISATE_2024_Secretariat@sp.edu.sg)