

## Introducing New Student Competition – 1<sup>st</sup> **International EDS MEMS Student Challenge**

Dear Colleagues and Friends,

The IEEE Electron Devices Society (EDS) is excited to announce the 1st International Student MEMS Challenge (2025 ISMC), to be held in conjunction with the IEEE International Conference on Device Technologies for Diversified Applications (DTDA) on October 20–22, 2025, in Sendai, Japan. This new competition is organized by the IEEE EDS MEMS Technical Committee.

The ISMC is designed to push MEMS fabrication beyond traditional approaches by showcasing hands-on innovation. Student teams will present their process flows, microscopy documentation, and functional MEMS devices, demonstrating creativity in both technique and application.

### **Competition Overview**

#### **Eligibility**

- Teams of 1–3 students
- Each team must have a faculty or industry mentor who is IEEE-affiliated
- If the work is published, it should be within the past one years.

#### **Submission Requirements**

1. **One-Page Pitch:** Highlight novelty, fabrication sophistication, functional capability, and potential applications
2. **Process Flow Document** (max. 2 pages): Step-by-step fabrication plan with parameters and diagrams
3. **Image Portfolio** (max. 2 pages): High-resolution SEM or optical microscope photos with annotations
4. **Functional Device Demo:** Pictures or video showing novel MEMS functionality

#### **Key Dates**

- **Sep 10, 2025** – Submission Deadline
- **Sep 15, 2025** – Finalist Announcement
- **Oct 21–22, 2025** – Finalist Presentations at DTDA 2025 & Award Ceremony

#### **Evaluation Criteria**

- Fabrication Novelty – 25%
- Novel Functional Capability – 25%
- Technical Depth & Complexity – 25%

- Image & Documentation Quality – 15%
- Presentation & Pitch Delivery – 10%

#### **Awards for the team**

- **1st Prize:** USD 1,000 + certificate
- **2nd Prize:** USD 600 + certificate
- **3rd Prize:** USD 400 + certificate
- **Finalists:** USD 300 + certificate (for the finalist who did not get a prize)
- Travel support for finalists to attend DTDA 2025<sup>#</sup>
- Free registration for DTDA 2025<sup>#</sup>

<sup>#</sup>One quota for one team, and valid for EDS members

Submission Email: [eds.mems.tc@gmail.com](mailto:eds.mems.tc@gmail.com)

Event Secretary Email: [melody0508h@gmail.com](mailto:melody0508h@gmail.com)

IEEE DTDA: <https://ieee-dtda.org/>

We warmly invite student teams worldwide to participate in this exciting new competition. It's a great opportunity to gain international recognition, showcase innovation, and connect with leading MEMS researchers and industry professionals.

We look forward to your participation!