

Cross-cultural Engineering Project (Innovation creation)

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
2026/01/28 ~2026/02/06	Thailand	King Mongkut's University of Technology Thonburi	•Systems Engineering and Science, Department of Machinery and Control Systems, Department of Planning, Architecture and Environmental Systems •Master 1st grade, Undergraduate 4th grade, Undergraduate 3rd grade	(SIT) Students 23, Student Staff 3, Professor 3 (King Mongkut's University of Technology Thonburi) Students 23, Student Staff 5, Professor 4, Staff 1	MANO Kazunori(), HASEGAWA Hiroshi(), MURAKAMI Kayoko(Electrical and Electronic Engineering Advanced Electronic Engineering)



Image1 Group photo

This gPBL is conducted in three regions: Bangkok, Thailand; Omiya, Japan; and Portugal. The main targets of each project are glocal, global-industrial-community collaboration, and innovation creation. CEP@KMUTT was targeted at glocal projects, with the following nine projects carried out. This year, KMUTT proposed disaster prevention as a key theme and implemented the following eight projects.

- 1.Real-time service that guides you to the safest
- 2.Shelter Supplies Status Verification App
- 3.FLOOD RISK MONITORING SYSTEM IN THAILAND
- 4.SAFEFIT
- 5.Mental Health in the Disaster Shelter
- 6.Origami Diary
- 7.WildFire Prevention
- 8.Guard of Thailand~To save people from the flood~

This CEP starts with the exploration of a problem, and then proposes a solution through problem setting, solution derivation, and prototyping based on systems thinking in systems engineering. This year, project teams developing applications using digital maps took first and second place. The top-ranked project team was "Real-time service that guides you to the safest." They presented a prototype application that provides real-time updates on evacuation shelters, routes, and evacuee information—all in one—before and during disasters.



Image2 1st place project team



Image3 Project Work



Image4 Icebreaking



Image5 Final Presentation