芝浦工業大學 SHIBAURA INSTITUTE OF TECHNOLOGY

AY2024 Global PBL (Inbound) Performance report

SIT+AIT+KU+KMUTT+SUT+NTU gPBL: Global Workshop on the expectations and role of civil engineering in different countries

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
2025/2/24 - 2025/3/5	Japan	Shibaura Institute of Technology (SIT) Asian Institute of Technology (AIT) Kasetsart University (KU) King Mongkut's University of Technology Thonburi (KMUTT) Suranaree University of Technology (SUT) National Taiwan University (NTU)	# Civil Engineering # Undergraduate 1st grade; Undergraduate 2nd grade; Undergraduate 3rd grade; Undergraduate 4th grade; Master 1st grade; Master 2nd grade	[Shibaura Institute of Technology (SIT)] Students 35; Student Staff 13; Professor 1; Staff 1 [Asian Institute of Technology (AIT)] Students 22; Professor 2; Staff 1 [Kasetsart University (KU)] Students 42; Professors 3; Staff 2 [King Mongkut's University of Technology Thonburi (KMUTT)] Students 20; Professor 1 [Suranaree University of Technology (SUT)] Students 5; Professor 1 [National Taiwan University (NTU)] Students 11; Professors 3; Staff 3 Total: 165	Inazumi, Shinya (College of Engineering)

Fig. 1 Group photo

A global PBL program on "Expectations and Roles of Civil Engineering in Each Country" was held at the Toyosu Campus of Shibaura Institute of Technology. The objective of this program was to jointly create the ideal image and future of civil engineering in each country, based on the premise that civil engineering has the nature of "civil engineering" and plays different roles depending on the national land, environment, and culture of each country or region.

The program brought together 48 civil engineering students (including TA students) from Shibaura Institute of Technology as well as students from other Asian countries. Specifically, 22 students from Asian Institute of Technology (AIT), 42 from Kasetsart University (KU), 20 from King Mongkut's University of Technology Thonburi (KMUTT), 5 from Suranaree University of Technology (SUT), and 11 from National Taiwan University (NTU) participated, making a total of 165 civil engineering students including faculty members. A multinational team of 165 members, including faculty and staff, was formed. Participants from different countries and cultural backgrounds worked together on the project, which provided an opportunity not only to share technical knowledge but also to deepen cultural exchange.

During the Global PBL, participants had the opportunity to experience different cultures. The yukata workshop promoted international exchange through traditional Japanese costumes and provided an opportunity to deepen understanding of different cultures. Such cultural exchange not only contributed to technical discussions, but also to building smooth communication.

In addition, special lectures provided a deeper understanding of the expectations and roles of civil engineering in each country. New approaches to designing disaster resilient infrastructure and creating sustainable cities were introduced, with special emphasis on the need to develop infrastructure in response to climate change. In this way, students learned not only theoretical knowledge but also practical perspectives and deepened their awareness of the role that civil engineering can play.

The participants were further divided into nine groups to discuss the topic "Expectations and roles of civil engineering in each country". Each group discussed the need for civil engineering in Japan, Thailand, Taiwan, and other countries, bringing their own technical expertise and integrating different perspectives. Through this discussion, participants were able to understand the technical differences between countries and develop the ability to integrate different approaches.

In the final presentation, each group proposed creative ideas and solutions based on what they had learned. Many of the proposals were related to interconnecting infrastructure across Asia and strengthening disaster preparedness, providing an opportunity for all participants to deepen their understanding of the importance of infrastructure resilience and sustainability in the Asian region. The students reaffirmed the importance of cross-border cooperation by sharing their own technologies and knowledge with participants from other countries and learning new lessons.

This global PBL was not only an exchange of technical knowledge, but also a valuable opportunity for participants from different countries and cultural backgrounds to work together and gain new perspectives on international issues. The participants considered the social role that civil engineering should play from different perspectives and reaffirmed the importance of infrastructure resilience and sustainability in the Asian region. Through this experience, they are expected to make the most of it in their future studies and careers.

Fig. 2 Lecturer and students in the

Fig. 3 Group activity (1)

Fig. 4 Group activity (2)

Fig. 5 Cross-cultural exchange

Fig. 6 Students and instructor in the

Fig. 7 Students giving their final