During November 9 through November 16, 2019, we carried out a global PBL (Project Based Learning) program successfully in Omiya Campus of SIT. The participants are 15 students of Institut Teknologi Sepuluh Nopember (ITS), Indonesia, and 19 students from Department of Mathematical Sciences, SIT, Japan. In addition to four supervising professors and four teaching assistants, 21 student staffs helped to organize several activities and they chaired all the ceremonies and presentations.

There are two group works in this gPBL. The first one is designed for the ITS students to investigate SIT in detail for future possibility to come to study as an exchange or a regular student. With the help of SIT students, they looked around Omiya Campus, interviewed SIT professors and foreign students, and finally presented their viewpoint of SIT from their own angles. The second group work is focused on a mathematical problem: how to design and hand make a container with largest volume from a given cardboard of A4 size. This is an optimization problem with constraints of total area, and it is also aimed at combining theoretical analysis and practical capability. All the students are divided into 5 groups, composed of both ITS and SIT students. Each group discussed the detailed problem formulation, production plan, and made their original container with the cardboard and other tools. At the presentation on November 16, all groups showed their original product and explained their ideas with rigorous mathematical study.

During this gPBL, intercultural exchange activities including Japanese martial arts, Yukata, and Origami were also held, and the ITS students also visited the Math Museum in Tokyo University of Science. It seems that all the participants enjoyed the global communication and group work discussion, and most of them became good friends through this project.