



芝浦工業大学
 SHIBaura INSTITUTE OF TECHNOLOGY

AY2024 Global PBL (Inbound) Performance Report

Shibaura Institute of Technology Robotics Laboratories Research Exchange Program

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
2025/02/14 ~2025/02/26	Japan	Pusan National University	Department of Electrical Engineering, Electrical Engineering and Computer Science Undergraduate 2nd ~4th grade, Master 1st~ 2nd grade	(SIT) Students 10, Student Staff 8, Professor 5 (Pusan National University) Students 13, Professor 1	YOSHIMI Takashi (Electrical and Electronic Engineering Electrical Engineering and Robotics), ANDOU Yoshinobu (Electrical and Electronic Engineering Electrical Engineering and Robotics), HASEGAWA Tadahiro (Electrical and Electronic Engineering Electrical Engineering and Robotics), YONEMITSU Fumiyu (Electrical and Electronic Engineering Electrical Engineering and Robotics), ABIKO Setoko (Electrical and Electronic Engineering Electrical Engineering and Robotics)



All Participants

Under the participation of the students from Busan National University (PNU) in Korea, we had an inbound gPBL at Shibaura Institute of Technology (SIT) this year also. 13 students (3 4th year undergraduates and 10 1st year master course students) from PNU, which is more than three times as many as last year, and 10 students (2 2nd year, 5 3rd year, 2 4th year undergraduates and 1 1st year master course student) from SIT participate, and it becomes a large-scale gPBL with a total of 23 students this year. Therefore, we made four mixed groups of Japanese and Korean students, and the students worked on solving each problem at four laboratories in the Electrical Engineering and Robotics Course (Abiko Lab., Ando Lab., Hasegawa Lab. and Yoshimi Lab.). The study themes prepared by each laboratory were, "Trajectory generation simulation of a manipulator using a humanoid robot (Abiko Laboratory)", "Development and function expansion of a line tracing robot (Ando Laboratory)", "Human following by an autonomous mobile robot (Hasegawa Laboratory)", and "Realization of a human-friendly guide robot (Yoshimi Laboratory)". Although it was a short gPBL period of time, each group student worked together and discussed to solve the problems they were given. As for off-campus activities, the students toured the manufacturing company and the national research institute, where they touched to Japanese cutting-edge mechatronics technologies and deepened their knowledge. On the last day, each group member gave a final presentation on the results of their project efforts, and at the closing ceremony, all students were presented with a certificate of completion. Through their participation in this gPBL program, the students were able to broaden their technical knowledge, and through interactions in group activities, they were able to promote mutual understanding between Japan and Korea.



Lab Working (1)



Lab Working (2)



Mobile Robot Experiments



Robot Arm Experiments



Lab Tour



Final Presentation