

## AY2024 Global PBL (Outbound) Performance Report

## gPBL on Autonomous Systems and Intelligent Devices

| Date                      | Place | Partner Organization   | Students' Major and Grade  | Participants' Information  | SIT Instructor   |
|---------------------------|-------|------------------------|--|--|--|
| 2025/03/19<br>~2025/03/29 | Italy | University of Florence | Department of Information and Communications Engineering, Innovative Global Program, Department of Materials Science and Engineering, Mechanical Engineering, Applied Chemistry Undergraduate 1st ~3rd grade | (SIT) Students 17, Student Staff 2, Professor 3 (University of Florence) Students 17, Professor 3, Staff 6 | TROVATO GABRIELE<br>(Innovative Global Program)<br>PHAN XUAN TAN<br>(Innovative Global Program)<br>LAOHAKANGVALVIT<br>TIPPORN<br>(Innovative Global Program) |



gPBL introduction

gPBL (Global PBL) 2025 was held at the University of Florence, Italy. This programme involved students in Biomedical Engineering in Florence, whereas SIT participants were students from IGP and other departments. Students were divided into 6 groups of 6-7 members each, which were assigned randomly a topic (e.g., education, emergency, etc.). In each group, the students brainstormed, found technical problems in existing research, and discussed the solutions to overcome the difficulties. Based on the solutions, they proposed systems and developed a proof of concept. As a required from the Italian side, the use of STM Nucleo, and its code conversion from Arduino, was particularly emphasised. Finally, they presented their achievements and demonstrated the developed systems to show the feasibilities.



gPBL group work



International students welcome event at the rectorate



gPBL group work



Final presentations



Lab visit



Group photo at the Closing Ceremony