<<Graduate School>>Development of novel support system

| Implementation period | Implementing country | SIT's implementation partner organization | Target students | participant | SIT instructor |
|---------------------------|-------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2019/09/17 ~2019/09/28 | Japan | University of L'Aquila | Systems Engineering and Science, Mechanical Engineering Master 1st grade, Master 2nd grade | (SIT) 10 students (L'Aquila) 12 students | ITO Kazuhisa(Department of Machinery and Control Systems), HANAFUSA Akihiko(Department of Bioscience & Engineering), TAKAGI Motoki(Department of Bioscience & Engineering) |



Image1

The global PBL for device development with University of L'Aquila (UNIVAQ) since 2012 was held by 5 teams of 10 students from SIT and 12 students from UNIVAQ on the condition that they were conscious of ergonomic design, especially on the theme of proposals for supporting equipment in the factory. The purpose was to show that the required specification is satisfied by design calculation and simulation, and to perform control system design and evaluation of energy saving.

The first day started with a tour for the company's production line in the afternoon and finding problems, and the participants seemed to feel a lot from the actual work. On Friday, the fifth day, each group made an interim announcement regarding development motives, design policies, and specific development points. The time was 5 minutes, but questions were rarely made by the students, and mainly from professors.

On the 10th day of the final day, the final presentation was 10 minutes and the question and answer period was 15 minutes. Each group has reported sufficient results, and in particular, the best team has shown results such as control system design and simulations showing greatly improvements to conventional system. On the evening of this day, a Farewell party was held at the Coop cafeteria, where a certificate of completion and awards to the best team were made.

In this PBL, Japanese students' ability to find problems and propose solutions is relatively high for Italian students because they have already studied the system engineering in the undergraduate course, but it cannot be sufficiently appealed them due to lack of English proficiency. I felt that many students were feeling frustrated. This is also true for the question and answer session at the time of presentation, and I would like this experience to be used in future language studies and research presentations.



Image2



Image3



Image4