

## Development of novel support system (University of L'Aquila, Italy)

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
2022/09/12 ~2022/09/23	Italy	University of LAquila	<ul style="list-style-type: none"> <li>•Mechanical Engineering, Systems Engineering and Science</li> <li>•Master 1st grade, Master 2nd grade</li> </ul>	(SIT) Students 8, Professor 3 (University of LAquila) Students 8, Student Staff 2, Professor 4	ITO Kazuhisa(Department of Machinery and Control Systems), HANAFUSA Akihiko(Department of Bioscience & Engineering), TAKAGI Motoki(Department of Bioscience & Engineering)



Image1 Opening of gPBL

Global PBL was held at L'Aquila University for 10 days from September 12th (Mon) to 23rd (Fri). 8 students from L'Aquila University (5 in the mechanical engineering, 3 in the information and automation) and 8 students from SIT (4 in the mechanical engineering, 4 in the systems science and engineering) took part in and are assigned to 4 international groups. The mission was "Proposal of Innovative Skill Transfer System," which aims to prevent the loss of skills and technologies due to aging, lack of successors, cultural gaps and so on. We started by finding out themes through two factory tours, and made a midterm presentation in the afternoon of the fifth day. Presentations focused on Japanese traditional arts / crafts and Italian leather product techniques, and questions were made by 4 faculty members from the University of L'Aquila and 2 from SIT. In the second week, in addition to novelty, discussions and work were carried out with the aim of quantitative evaluation by simulations, design of specific equipment, sensor placement for measurement, cost evaluation, etc. On the final day, a 15-minute presentation followed by a 10-minute Q&A session was held for the final presentation. The participants from both countries were required to take turns giving presentations and answering questions.

This time, unlike the previous 8 PBL, the mission was not focused on the automation and work support systems, but on the skills and the transfer-learner. The communication gap even among Japanese students was larger. However, as time goes by, the process of solving this gap progressed, and many of the final impressions and many realizations were obtained. We could observe that the resumption after a 2-year suspension led to very good results.

The professors in charge closed this PBL by confirming the effectiveness and preparation for the next year's PBL at SIT.



Image2 Snap shot of Gr.A



Image3 Snap shot of Gr.B



Image4 Snap shot of Gr.C



Image5 Snap shot of Gr.D