

AY2021Global PBL (Online)Performance report

International Training of English and Introduction to Embedded Programming for International Course

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
Feb 28 ∼Mar 05, 2022	Japan	I–Shou University Institut Teknologi Sepuluh Nopember Universiti Teknologi Mara	Department of Bioscience and Engineering Department of Electronic Information Systems Department of Machinery and Control Systems Department of Planning, Architecture and Environmental Systems Undergraduate 1st grade	(SIT) Students 27, Student Staff 6, Professor 6 (I-Shou University) Students 15, Professor 1 (Institut Teknologi Sepuluh Nopember) Studente 31 Professor 2	HANAFUSA Akihiko (Department of Bioscience & Engineering) FUKUI Koji (Department of Bioscience & Engineering) TAKAGI Motoki (Department of Bioscience & Engineering) SHAHROL BIN MOHAMADDAN (Department of Bioscience & Engineering) MIYOSHI Takumi (Department of Electronic Information Systems) ICHIKAWA Masafumi (Shibaura Institute of Technology,Kashiwa Senior High School)



Image1 State of room in SIT

Program was held from 28nd of Feburary to 5th of March. A total of 56 students participated via online from I-Shou University (Taiwan), ITS (Indonesia) and UiTM (Malaysia). And 27 students from Shibaura Institute of Technology participated by face-to-face or online.

From 28nd of Feburary to 1st of March, classes and exercises on the basics of C language was held, and from 2nd to 3rd of March, classes and exercises on input / output control to electronic circuits using Arduino microcontrollers by C language was held. Students who participated face-to-face and students who have their own kits assembled electronic circuits using the kits, and students who do not have the kits used the TinkerCAD web based simulation system provided by Autodesk Corp.

From the afternoon of 3rd to 5th of March, 15 groups from A to O containing 1 to 2 students from each university were formed, and the system was developed using the Arduino kit. The system was configurated through discussions, electronic circuits were assembled, and programs were developed in cooperation with group members.

On 5th of March, each group gave an 5-minutes prepared presentation. All students and faculty members voted from the three perspectives of originality, completeness, and presentation, and the three highly evaluated groups (1st group D, 2nd group C, 3rd group M) were awarded.

A score of 40 points for C language exercises, 30 points for Arduino exercises, and 30 points for system creation and presentation by group work were evaluated, and 2 credits were certified to students who got 60 points or more, including students from I-Shou, ITS and UiTM universities.



Image2 During discussion



Image3 During building circuits



Image4 Teachers in closing ceremony