

HUST-HCMUT-UNITEN-SIT on-line gPBL

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
Jan31 ~Mar29, 2022	Japan	Hanoi University of Science and Technology Ho Chi Minh City University of Technology Universiti Tenaga Nasional	•Department of Electrical Engineering •Undergraduate 4th grade	(SIT) Students 4, Student Staff 2, Professor 2, Staff 1 (Hanoi University of Science and Technology) Students 6, Professor 1 (Ho Chi Minh City University of Technology) Students 5, Professor 1 (Universiti Tenaga Nasional) Students 4, Professor 1	FUJITA Goro (Department of Electrical Engineering) Sandro Sitompul (Postdoctoral Researcher)

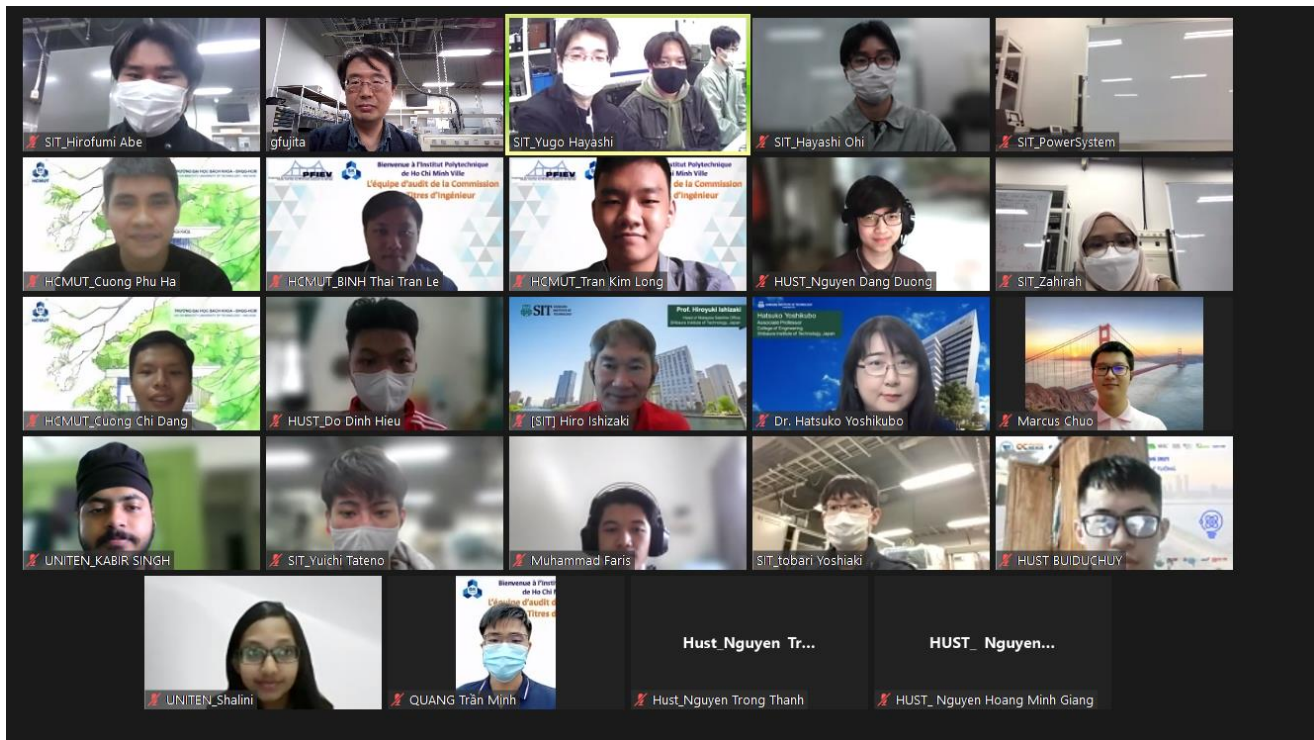


Image1 Attendee

Online gPBL with HUST, HCMUT and UNITEN was conducted from January to March 2022. Providing electricity is quite important to sustain modern society. In order to realize high quality electricity reliability, sophisticated generator control is required so that stable frequency and voltage are maintained. This PBL provides opportunity to understand how to control generator with learning control theory. In the beginning, students at each university learn control theory using a kit. After understanding the control theory, students try to design generator controller to maintain good power quality. The experiment is performed at SIT so the deep discussion and role assignment to foster better understanding are necessary.

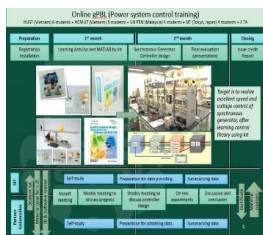


Image2 Program structure



Image3 Experiment (1)

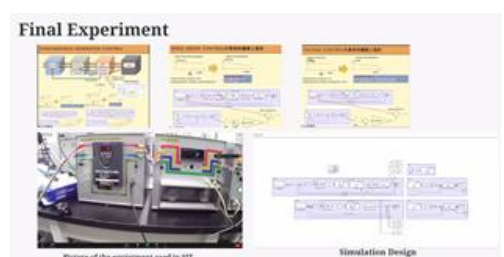


Image4 Experiment (2)