

# FY2016 Inter-University Exchange Project Niigata University

Support for the Formation of Collaborative Programs with Universities in Asia

## 【Name of Project】(Adopted year: FY2016, (Type B, ASEAN))

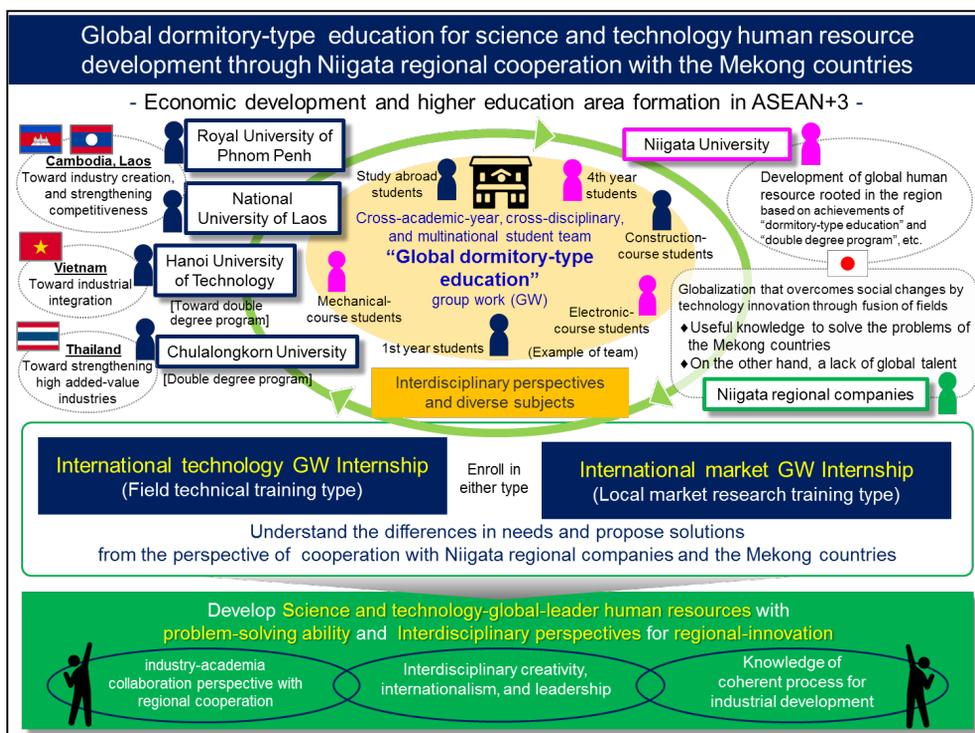
Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

## 【Summary of Project】

The purpose of this project is to foster global leaders in the field of science and technology who have the ability to solve regional vitalization issues from an integrative standpoint. This interactive educational project will be achieved through group work (GW) internships cooperated with Niigata regional companies and the Mekong countries by utilizing the information from the achievements of “dormitory-type education” developed by the Faculty of Engineering, Niigata University, and “Double Degree Program” between the Graduate School of Science and Technology, Niigata University, and Chulalongkorn University, Thailand.

\* In the “dormitory-type education”, Problem-Based Learning is conducted by student teams that cut across academic year and field of study, and students will learn leadership and cooperation as well as gaining research skills.

Human resources developed under this project will realize regional innovation and creation with a global perspective and be expected to contribute to creation and development of sustainable, high-quality industry in infrastructure and manufacturing industries. The project will also aim to expand the “global dormitory-type education” both in Japan and the Mekong countries as an international standardized GW program with quality assurance. As a result, it will contribute in a pioneering way to the economic development of ASEAN +3 and formation of higher education framework in Asia.



## 【Summary of Exchange Program】

Students from Niigata University and other universities in the Mekong countries shall form cross-academic year, cross-disciplinary, multinational student teams, which is a characteristic of “dormitory-type education”, and will conduct mainly GW in short-term (10 days), medium-term (2 months) and long-term (6-12 months) courses. In GW internships, students will experience different societies at first hand, aiming to develop knowledge of a coherent process for industrial change. This will be done with cooperation of Niigata regional companies that possess international development capabilities (including local subsidiaries in the Mekong region). In addition, students will understand the different problems and needs of different countries from the perspective of regional cooperation.

## 【Global Human Resource to be Developed on the Project】

- Practical, globally-minded human resources for science and technology that can contribute to regional innovation by identifying, analyzing and solving problems from a global viewpoint. This will be achieved through group discussions on the different needs of Japan and the Mekong countries and how they can be matched from the perspective of regional industry-academia linkage.
- Human resources that possess skills in interdisciplinary innovative creativity with a global perspective, international cooperation, English debating and leadership through GW activity experiences with cross-academic year, cross-disciplinary, multinational team members.
- Global human resources for science and technology that can contribute to industry creation, development and sophistication as well as have knowledge of a coherent process for industrial development through overall hands-on understanding of industrial globalization initiatives in Japan and industrial development in the Mekong countries.

## 【Feature on the Project】

Based on “Dormitory-type Education”, this project develops an international standardized education program for science and technology, that is aiming to promote better understanding of students on joint challenges for higher quality growth of Mekong region and further internationalization of companies in Niigata, and to cultivate their practical skills for the challenges by collaborating diverse entities.

## 【Exchange Number】

	2016	2017	2018	2019	2020
Outbound	2	15	20	30	30
Inbound	2	15	20	26	26

# 1. FY2016 Progress

【Niigata University】

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Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

### ■ Exchange Programs



〈 Trial Student Exchange Program 〉

FY2016 was considered as a preparation period for the actual project implementation starting the following year. We established a fundamental framework for the management of the project by launching a new “International Education Division” and organizing various internal/external committees. Brochures and website for promotion of the project were also created. Furthermore, issues that need to be clear for further improvement of the exchange programs were discovered by operating the trial student exchanges and having useful comments from participated students and the company accepting GW internship.

### Student-Mobility

#### ○ Outbound

Two Japanese undergraduate students were dispatched to Chulalongkorn University (Thailand) for a short-term trial exchange program in March.

#### ○ Inbound

Two undergraduate students and three graduate students from Chulalongkorn University participated in a short-term trial exchange program. Undergraduate students experienced GW internship in a regional company while graduate students mainly conducted experiments in a laboratory with Japanese students.

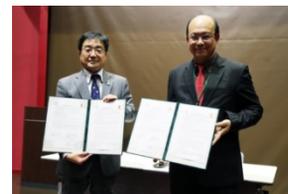
	2016	
	Plan	Results
Outbound	2	2
Inbound	2	5

### ■ Forming the University Network with Quality Assurance

Internal and external project committees composed of vice presidents and coordinators from each university formed “International Cooperation Steering Committee” as the decision-making organization responsible for quality assurance in education. “International Education Division” was newly launched to coordinate the entire project in the Education Center for Engineering and Technology which has a necessary background of managing dormitory-type education and internships. In FY 2016, we hold several committee meetings in Niigata and had a chance to hold signing ceremony of university-level agreement with Royal University of Phnom Penh (Cambodia) and Hanoi University of Science and Technology (Vietnam). “International 100-Wise-Men Network”, a group of external professional engineers providing support for internships, and “Third Party Advisory Board” responsible for evaluations and feedback were also organized as the last piece of a framework for the actual project implementation.



〈 Conference on International Cooperation Steering Committee in Niigata 〉



〈 Signing Ceremony 〉

### ■ Promotion of Student-Mobility Environment

The program manager and assistant coordinator with high English proficiency and wide-ranging overseas experience at “International Education Division” work closely with cooperated universities and provide students with a support on their study and daily life. Additionally, Placing a coordinator at each university in Mekong region facilitates the communication among universities in order to share necessary information and current situation. With this effort, students can easily have a consultation with the person who is in charge of the project and gain the latest information.

### ■ Internationalization of the University

#### Information Disclosure and Publication of Outcome

We introduced the project to various stakeholders inside and outside campus at the occasion of Kickoff Symposium in December and International Forum in March. We also created brochure and website for the project written in Japanese and English, making it easy for students to access project information including outlines, achievements, exchange programs, and events.

### ■ Good Practices

By holding the first International Cooperation Steering Committee and Kickoff Symposium at Niigata University with vice presidents and coordinators from each university, we were able to share the significance of the project, and earn understanding and support from stakeholders both in Japan and Mekong region. This event including the signing ceremony holding in front of 180 participants was posted in a local newspaper and it helped the project to become recognized in public.

## 2. FY2017 Progress

【Name of project】(Adopted year: FY2016, (Type B, ASEAN))

Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

### ■ Exchange Programs



Short-term Program in Niigata

Niigata University (NU) in collaboration with four partner universities in the Mekong region conducted interactive exchange programs that include group work internships. To share in the fruits of the programs, a forum and an international symposium took place in conjunction with short-term programs in Niigata as well as in Thailand. At the same time, project committee meetings were organized by inviting educational staff of the partner universities, so that our relationship for close coordination was improved. This resulted in the achievement of exchanges more than the plan.

A series of activities of the program in before and after studying abroad such as a pre-study, a post-study, a presentation in English and an evaluation was set up. Requirements for the completion of the programs were established, and a certificate was issued to total 32 students. Furthermore, from host universities, 22 students in inbound programs and 26 students in outbound programs participated as team members of group works. Thus, educational effects were able to be spread to more students than the actual number of students studied abroad.

### Student-Mobility

#### ○ Outbound

As a practical starting year of student exchange programs, we sent a total of 17 students to the Mekong countries [10 students in short-term (10 days), 6 students in medium-term (2 months), and 1 student in long-term (6 months)]. Students participated in some lectures and lab activities at their host university as well as group work internships with local students.

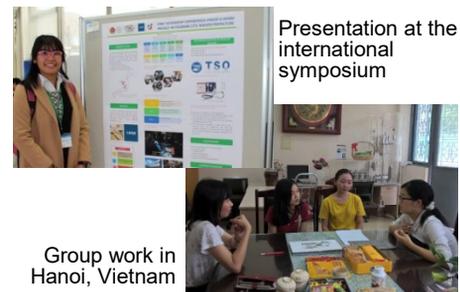
#### ○ Inbound

The inbound programs were offered with the same 3 courses as the outbound programs and 8 short-term, 6 medium-term, and 1 long-term students were accepted. In addition to the planned programs, 4 students participated in a special follow-up program in short-term.

	2017	
	Plan	Results
Outbound	15	17
Inbound	15	19

### ■ Forming the University Network with Quality Assurance

- Closer collaboration among partner universities was established by holding several times of face-to-face steering meetings.
- Subjects related to the programs were set up, and necessary arrangements for the program completion were established at relevant departments.
- Assessment sheets for internships and lab activities were developed and were used as evidence of evaluation for related subjects.
- A supplemental document for credits transfer, based on "ASEAN Plus Three Guidelines on Transcripts and Supplemental Documents for Academic Record of Exchange Students (draft)", was issued. Also, another document was issued in order to convey records of activities that were not directly related to recognition of credit. Both documents together were delivered to the Mekong universities.



Presentation at the international symposium



Group work in Hanoi, Vietnam

### ■ Promotion of Student-Mobility Environment

- In order to ensure security and confirming safety, guidance sessions on overseas safety management were offered to students. In addition, subscribing designated insurance was required in both inbound and outbound programs.
- Program coordinators both in NU and partner universities provided students not only with supports on their learning but also with consultations on internship.
- Active supports from group work members at host university were voluntarily offered to participants since they performed activities together as a team.

### ■ Internationalization of the university

#### Information disclosure and Publication of outcome

- This project is consistent with one of the basic strategy of functional enhancement at NU and promoted the internationalization of NU in cooperation with "Network for Education and Research on East Asian Rim" that was newly established by cross-departmental consensus.
- An international symposium that was held at NU in conjunction with other international conference organized by five universities in East Asia, helped to disseminate knowledge gained from the project. Also, a presentation on achievements of the project was provided at the 65th JSEE Annual Conference.
- Activity reports using photos and movies were frequently posted on the project Facebook page in both English and Japanese. Also, reports from the participants posted on the website provided prospective students with familiar and accessible information.

### ■ Good Practices

- The group work among students in different grades, fields, and nationalities provided them a supportive environment to help and learn each other not only in terms of studies but also understanding on local situation and culture.
- Holding a workshop for host companies on reflection of internship gave an opportunity to exchange of opinions and evaluation: it can be connected towards the improvement of the program in the following year.
- The participated students became resource persons in the network to support new participants by sharing their knowledge and experience on the programs. This can be extended to achieve further exchanges in the future.
- Implementing internships collaborated with *Tsubame Social Square Project* under the partnership agreement between NU and Tsubame city was enabled to contribute to regional revitalization.

# 3. FY2018 Progress

【Name of project】(Adopted year: ( FY2016, (Type B, ASEAN) )

Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

## ■ Exchange Programs

Niigata University (NU) in collaboration with four partner universities in the Mekong region conducted interactive exchange short-, medium-, and long-term programs that include group work (GW) internships. A total of 45 exchange students formed 27 groups with a total of 41 host university students and conducted GW internship at 27 companies in Niigata or Mekong countries. Exchange students also participated in some lectures and lab activities at their host university. All the exchange students earned enough credits based on the evaluation from a series of activities before, during, and after studying abroad and were awarded a certificate of completion. Increasing of “Step-up participants\*” resulted in the achievement of exchanges more than the plan.



Short-term Program in Vietnam

\*Students who had participated in the program before and further improved themselves with participating again in more advanced program, such as host student programs to exchange student programs or short-term to medium-term.

## Student-Mobility

### ○ Outbound

A total of 25 students were sent to the Mekong countries [16 students in short-term (10 days), 7 students in medium-term (2 months), and 2 student in long-term (6 months)]. GW internship with host university students worked well on building a good relationship among students and led better understanding of intercultural situation.

### ○ Inbound

The inbound programs were offered with the same 3 courses as the outbound programs and 14 short-term, 6 medium-term, and 2 long-term students were accepted. Support activities by GW members and a community of alumni students of the program became a good opportunity of cross-cultural understanding, which generated further motivation of host university students for studying abroad.

	2018	
	Plan	Results
Outbound	20	25
Inbound	20	22

## ■ Forming the University Network with Quality Assurance

- NU and the partner universities have worked on a formation of a framework of inter-university collaboration with quality assurance by holding several times of steering meetings which consist of members of NU project committee and overseas project committee and discussing plan, implementation, achievement, and improvement of the project.
- A supplemental document for credits transfer, based on “ASEAN Plus Three Guidelines on Transcripts and Supplemental Documents for Academic Record of Exchange Students” was attached to a transcript of record, leading to a shared framework for grading in higher education with quality assurance. Agreement on Double Degree Program with Hanoi University of Science and Technology was concluded in May, 2019.

## ■ Promotion of Student-Mobility Environment

- Based on close relationship with NU and the partner universities, various information on students before and during study abroad was shared among the universities so that enough student support in academics and life was provided.
- In order to ensure security and confirming safety, we offered guidance sessions on overseas safety management, opportunities of meeting students who participated in the program before, and a rental of SIM-free mobile phone to NU students before going abroad.
- During the exchange program, students were cared by face to face and/or email for inbound program, and by phone, skype, and/or email for outbound program.

## ■ Internationalization of the university

### Information disclosure and Publication of outcome

- This project has contributed to internationalization of the university which has been promoted under “Establishment of a base for education and research in East Asian Region and a development of a system in retuning its achievements to communities” - one of the basic strategies of NU.
- Various information such as project details, student recruitment, and student reports was posted on the website. In addition, activity reports using photos and videos were frequently posted on the project Facebook page in both English and Japanese and we have reached over 200 followers.
- Presentations on achievements of the project were provided at the 7th ACEE by 4 students and 1 professor, and the 66th JSEE Annual Conference by 1 professor to disseminate knowledge gained from the project. This also became a good opportunity for the students to follow-up and strengthen what they learned from the project.

## ■ Good Practices

- Positive spiral of increasing “Step-up participants” who studies abroad after joining host student programs was led by communication between the participants, exchange students and ex-participants of the program. It proofs that a stepwise and diverse program structure of the project which has exchange student programs as well as host students programs is one of the excellent features.
- Based on the Comprehensive Cooperation Agreement between NU and Tsubame City, the project implemented global PBL-type GW internships with regional companies in collaboration with *Tsubamate*, which is an organization promoting industrial development through internships in the city. It resulted in gathering public interests by press and web report of the city mayor, as not just a working experience but an innovative promotion of regional industries.

# 4. FY2019 Progress

【Name of project】(Adopted year: (Adopted year: FY2016, ( Type B, ASEAN ))

Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

## ■ Exchange Programs



Short-term Program in Niigata

Niigata University (NU) in collaboration with four partner universities in the Mekong region conducted interactive exchange short-, medium-, and long-term programs that include group work (GW) internships. A total of 40 exchange students formed 23 groups with a total of 33 host university students and conducted GW internships at 24 companies in Niigata or Mekong countries. Exchange students also participated in some lectures and lab activities at their host university. All the exchange students earned credits based on the evaluation from various activities before, during, and after studying abroad. Thirty-nine of them who have fulfilled the requirements were awarded a certificate of completion. The short-term outbound program in Cambodia, which was originally scheduled in February, is planned to conduct in 2020 as a new student exchange including online activities.

## Student-Mobility

### ○ Outbound

A total of 14 students were sent to the Mekong countries [12 students in medium-term (2 months) and 2 students in long-term (6 months)]. GW internships with host university students worked well on building a good relationship among students and led better understanding of intercultural situations. The short-term program (10 days), which was planned to conduct in February with 18 selected students, has been postponed because of the COVID-19.

### ○ Inbound

The inbound programs were offered with 3 courses and 16 short-term, 8 medium-term, and 2 long-term students were accepted. Support activities by GW members and a community of alumni students of the program became a good opportunity for cross-cultural understanding, which generated further motivation of host university students for studying abroad. It led more students to apply for outbound programs.

	2019	
	Plan	Results
Outbound	30	14
Inbound	26	26

## ■ Forming the University Network with Quality Assurance

- NU and the partner universities have worked on improving the project and tighten the collaboration by holding face-to-face steering meetings including online to exchange opinions about the challenges for quality assurance towards the following year.
- A supplemental document for credits transfer, based on “ASEAN Plus Three Guidelines on Transcripts and Supplemental Documents for Academic Record of Exchange Students” was attached to a transcript of record, leading to a shared framework for grading in higher education with quality assurance.



Research activity with NU students

## ■ Promotion of Student-Mobility Environment

- Based on close relationship with NU and the partner universities, various information on students before and during study abroad was shared among the universities so that enough support was provided in academics and life.
- In order to ensure security and confirming safety, we offered guidance sessions on overseas safety management, opportunities of meeting students who participated in the previous program, and a rental of SIM-free mobile phone to NU students before going abroad. The ease of providing information and individual communication was enhanced by utilizing communication app that can be installed on mobile phone.
- During exchange programs, students were cared for by face to face and/or email for inbound programs, and by phone, skype, and/or email for outbound programs. Also, students were supported by ex-participants in each university.

## ■ Internationalization of the university

### Information disclosure and Publication of outcome

- A key-person of each partner university was awarded the honorary title of “LIAISON PROFESSOR”, which is a scheme as part of our strategy on developing and strengthening international network. With utilizing this scheme through expanding and deepening academic and student exchange, we expect to further strengthen presence of NU, as well as Niigata and Japan in the Mekong countries and to contribute to internationalization of the university.
- Various information posted on the website and the Facebook page in English and Japanese has resulted in attracting 1.5 times more followers in a year compared to the past year.
- Presentations on achievements of the project were provided at the 67th JSEE Annual Conference by a professor to disseminate knowledge gained from the project.

## ■ Good Practices

- GW internships in Niigata and Mekong regions were appreciated by companies accepting students for their business improvements, innovative ideas, human resource developments, etc. and were also reported in media such as the Nikkei.
- Based on the Comprehensive Cooperation Agreement between NU and Tsubame City, the project implemented global PBL-type GW internships with regional companies in collaboration with *Tsubamate*, which is an organization promoting industrial development through internships in the city. It resulted in gathering public interests by winning the “Award of Excellence” at the 3rd “Internship Awards Selected by Students” organized by Mynavi Corporation.

# 5. FY2020 Progress

【Name of project】(Adopted year: (Adopted year: FY2016, (Type B, ASEAN))

Co-creative Dormitory-type Group-work for Science and Technological Students in Japan and Mekong Countries with Regional Collaboration

## Exchange Programs



Niigata University (NU) in collaboration with four partner universities in the Mekong region conducted Collaborative Online International Learning (COIL) programs that include group work (GW) internships with Niigata regional companies. In addition, a 3 day COIL program was conducted as an alternative to the short-term outbound program in Cambodia which had been postponed due to the COVID-19 outbreak. A total of 64 students participated in these COIL programs and their achievements were shared at online forums which were held at the end of each program. Participated students earned one or two credits based on the evaluation from various activities before, during, and after the program, and 45 of them who have fulfilled the requirements were awarded a certificate of completion. The design and evaluation of the COIL program followed those of the study abroad program with GW internships developed by NU.

## Student-Mobility

### Outbound Inbound

A total of 3 COIL programs were conducted with 34 NU students and 30 students from the Mekong region. The second program included online lectures by faculty members of NU and the partner universities. Though it was not possible to conduct an actual student-mobility program under the COVID-19 pandemic, the COIL programs have motivated students toward study abroad or hybrid study abroad programs combining online learning and onsite learning.

	2020	
	Plan	Results
Outbound	30	34*
Inbound	26	30*

\* All the number in the column of "Results" is based on the number of participants who earned credits from the COIL program.

## Forming the University Network with Quality Assurance

- NU and the partner universities have worked on a flexible adaptation to the new era of student exchange by holding several times of online steering committee meetings in order to exchange opinions on the challenges involving quality assurance for online exchange.
- A supplemental document for credits transfer, based on "ASEAN Plus Three Guidelines on Transcripts and Supplemental Documents for Academic Record of Exchange Students", was attached to a transcript of record, leading to a shared framework for grading in higher education with quality assurance in online program.



Online final presentation connecting the companies and universities in all the countries

Group work online beyond the borders

## Promotion of Student-Mobility Environment

- Through conducting COIL programs, we could improve the video contents for pre-study on study abroad, and acquired the know-how for fostering cross-cultural understanding among students even in virtual exchange. These facts resulted in developing a learning environment that would be effectively used to realize the hybrid study abroad programs in post-COVID-19.
- The ease of providing information and individual communication was enhanced by utilizing communication apps that can be installed on a mobile phone. In addition, an online alumni association using the apps was established to create opportunities for extracurricular exchange, thereby maintaining and increasing the students' motivation for study abroad, and building a network for new participants receiving support and consultation easily by ex-participants.

## Internationalization of the university

### Information disclosure and Publication of outcome

- Based on the efforts of the COIL program, NU created the teaching material videos. It helped to promote the implementation of COIL programs in the university.
- Academic articles on the achievements of the project were provided at International Journal of Engineering Education and the 68th JSEE Annual Conference in an effort to disseminate the results with academic value.

## Good Practices

- By holding the forum online using Zoom, a web conferencing app, and live streaming on YouTube, the restriction of the number of participants by location or venue was eliminated. This enabled not only participants, but also general students who are interested in international exchanges at NU or partner universities to participate in the forum, leading to the dissemination of the achievements and expansion of the group of people who have interests in our program.
- Using the same structure of the study abroad program with GW internships, the COIL programs were implemented as global project-based learning in regional industry-academia collaboration, which is still lacking in practical examples in Japan. We found that it's possible to nurture global competencies as well as to stimulate understanding and interest in the industry from an international perspective, even online.