

【Name of the project】 (Adopted year: FY2021, (Type A①))

Joint Education and Research Programs of Top Asian Science and Engineering Universities (T²KN Consortium)

【Summary of Inter-University Exchange Projects】

Three world-leading science and engineering universities in East Asia—Tsinghua (China), KAIST (Korea), and Tokyo Tech (Japan)—formed the “TKT CAMPUS Asia Consortium” in 2011 and have worked together to promote education and research collaboration as well as faculty and student exchanges through CAMPUS Asia Project Modes 1 and 2. The Consortium builds upon its experience and achievements and seeks to expand its success beyond East Asia by inviting NTU (Singapore) to join the Project in Mode 3.

Project Objectives

1) Joint Research and Thesis Review

The Consortium will offer “Research experience internship programs” for undergraduate students and “Research-oriented programs” for graduate students. The latter will include the presentation of joint mid-term reports and a final thesis based on the existing degree examination framework at each university to realize “Research-oriented” in which all universities jointly provide guidance on thesis preparation and examination.

2) “Transcending Intelligence”: Intelligence transcending diversity in fields, cultures, regions, time, and environments.

The Consortium will facilitate inclusive educational and research environments for “transcending intelligence”.

3) Mutual Education and Grade Recognition / Common Quality Assurance Framework

The Consortium will ensure substantial equivalence of curricula and courses based on the regulations and systems of each university, promote mutual recognition of credits and common evaluation systems, and realize common and electronic certificates upon program completion. Based on the shared experience of development and implementation, it will prepare for the development of a joint degree or double degree program.

【Summary of the Exchange program】

This project will focus on “research experience internship programs” for 3rd and 4th-year undergraduate students and “research-oriented programs” for graduate students. It will also include summer schools, semester programs, double degree programs, and short-term workshops and symposiums. Each university will send 10 students to the partner university and receive 10 students every year starting from AY2022.

【Global Human Resource on the project】

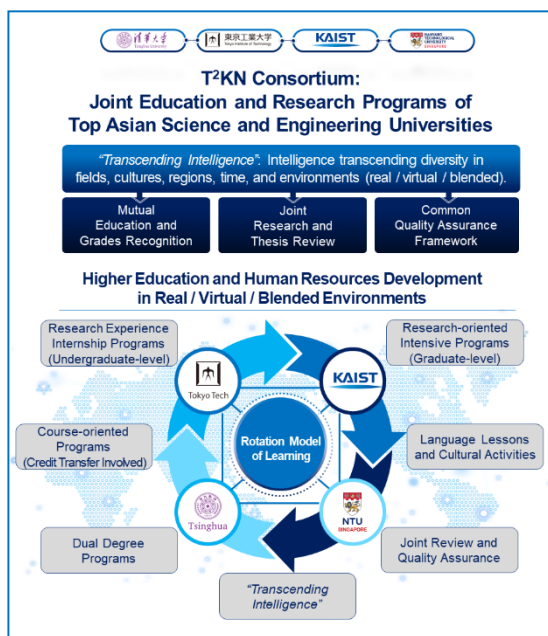
In the “new normal” global society, the Consortium will nurture global human resources equipped with “Transcending Intelligence,” who can not only overcome the differences in countries, cultures, and personalities but also have intellectual achievements by making the most of these diversities through collaboration in both real and virtual spaces across time and space with experts in different fields.

【Features on the project】

- The four universities comprising the Consortium will fully cooperate at the institutional level.
- A research program completion certificate signed by the four universities will be awarded to those who pass the evaluation criteria. The criteria will be determined based on common agreement among the four universities.
- The Consortium will facilitate inclusive (real/virtual/blended) educational and research environments for “transcending intelligence” while maintaining strong backgrounds in the STEM fields.

【Exchange number】

		2021	2022	2023	2024	2025
Out bound	Students studying abroad	4	0	0	0	0
	Students taking online international education and exchange programs in their home countries	4	8	8	8	8
	Students fulfilling both of the above requirements	0	10	10	10	10
In bound	Students studying abroad	4	0	0	0	0
	Students taking online international education and exchange programs in their home countries	6	12	18	12	18
	Students fulfilling both of the above requirements	0	10	10	10	10



The Consortium will facilitate inclusive educational and research environments for “transcending intelligence”.

1. FY2021 Progress

【Tokyo Institute of Technology】

【Name of project】(Adopted year: FY2021)

Joint Education and Research Programs of Top Asian Science and Engineering Universities
(T²KN Consortium)

■ Exchange Programs

In FY2021, Tokyo Institute of Technology, Tsinghua University, Korea Advanced Institute of Science and Technology (KAIST), and Nanyang Technological University (NTU) jointly held the "Winter Camp" online to prevent the spread of COVID-19. In total, 32 students participated. The program consisted of student-led activities, special lectures by faculty members from the four universities on the theme of "Art, Science and Technology in the New Corona Era," and team projects/team presentations. The participating students were divided into mixed teams from the four universities to interpret the theme, select an issue to tackle, devise a solution, and discuss its relationship to art before making their presentations on the final day of the program. It was an opportunity for the participating students to deepen their understanding and knowledge of each other through discussions, presentations, and exchanges with students of different nationalities, grades, and fields of expertise.

Student-Mobility

○ Outbound

In FY2021, it was planned to send a total of eight students, four for the online program and four for the short-term program, to NTU. However, to prevent the spread of COVID-19, the short-term program onsite was postponed to FY2022. Five students participated in the online program.

○ Inbound

In FY2021, it was planned to accept four students from partner universities for actual travel and six students for the online program, but due to COVID-19, the actual travel was postponed to FY2022. The online "Winter Camp" program held jointly by the four partner universities received 27 students, including 10 from Tsinghua University, 10 from KAIST, and 7 from NTU, which exceeded the initial expectation.



〈Consortium Logo〉

	2021	
	Plan	Results
Outbound	8	5
Inbound	10	27

■ Forming the University Network with Quality Assurance

- Although Tokyo Tech was the main host of the Winter Camp, the four universities collaborated from the planning stages of the program and structured it to enable each student from the four universities to have a diverse experience. In addition, we checked academic calendars and events in each country to ensure that the dates were convenient for students from each university to participate.
- Certificates of completion signed by project leaders from the four universities were issued to participating students who completed the program.
- The faculty members from the four universities held several online meetings to exchange opinions and discuss the content of the activities.

■ Promotion of Student-Mobility Environment

- Prior to the Winter Camp, a welcome kit was sent to each participating student from the Consortium, including a sweatshirt, educational materials, and a leaflet to be used in the program. This helped create a sense of unity and solidarity among Campus Asia students owing to the participation in the same program, although online.
- A Slack workspace was set up for the Winter Camp, which enabled participating students to exchange ideas and opinions efficiently.

■ Internationalization of the university,

Information disclosure and Publication of outcome

- Offering an online program provided an opportunity for international exchange for TUFS students to meet at a time when opportunities for students to study abroad were significantly reduced due to the pandemic.
- A video introducing the program and digest video of the Winter Camp were created and posted on the university's website, official YouTube channel, and program's website to promote the program among students, faculty, and staff, as well as the general public.

■ Good Practices

- One of the students who participated in the 2021 Winter Camp was accepted to study abroad at NTU for the first semester of 2022, which is an excellent example of how the online program experience can lead to long-term programs to study abroad.
- Providing pre-program English lessons to Tokyo Tech students helped eliminate concerns prior to their participation in the program, allowing them to attend the program with increased confidence.



Group photo 〈Online Winter Camp〉