

Project Name: Global Science and Engineering Leader Development Collaborative Network

Year Adopted: FY2011, Type B-1

Summary:

This project provides start-to-finish education for internationally-oriented students, from university admission to graduation and employment, with the aim of developing future global science and engineering leaders. Through an established international collaborative network with world-leading science and engineering universities in Europe, the US and Asia, the project offers a research-oriented overseas education program for undergraduate and graduate students for a summer or a period of up to one year. Both constitute a new model of exchange for science and engineering students.

■ Project Aim and Global Human Resource Ideals

○ Construction of a world-class cooperative network and development of elite global human resources

Based on the results of collaboration with major universities in Asia and Europe, the project has constructed a systematic cooperative network with major US universities which have traditionally pursued exchanges individually with the Institute and strives to develop elite global human resources in academia, research, industry, international organizations and in other sectors who will make global contributions to society.

■ Content of the Programs

○ Initiatives to foster international-mindedness in Tokyo Institute of Technology students

This project supports students from university admission to graduation and, engages in (1) activities to engage high school students in science and engineering; (2) the development of an international liberal arts education program; (3) the development of a research-oriented Summer Program; (4) the development of the Joint Educational Program (for graduate students for a summer or a period of up to one year); and (5) the development of an international career advice and support system.

○ Summer Program focused on Research and Education / Joint Educational Graduate Program

The research-oriented Summer Program, number three above, consists of short-term research projects, lecture-based coursework on common themes, and coursework in specialty fields in English under the name Tokyo Tech International Research Opportunity Program (TiROP), in which undergraduate and master's students join a laboratory for the summer and possibly the fall term. The Joint Educational Program, number four above, consists of research activities at partner universities for a fixed period on research themes jointly set by Tokyo Institute of Technology and partner universities.

■ Forming a University Network with Quality Assurance

○ Basic approach to the assurance of quality

The basic approach of the project is to construct a system for the certification of quality assurance recognized by partner universities that allows participating students to effectively achieve satisfying results in their coursework at partner universities.

○ Guidance and advice through Study and Research Plans

For each student, academic advisors at both the home and host university maintain communication and through the utilization of a Study and Research Plan/Record provide guidance and advice regarding course choices and research before, during and after study abroad.

■ Making Educational Content Visible

○ Web-based provision of information and development of outstanding human resources

In implementing the program, the Institute has established a unique website associated with the existing Tokyo Institute of Technology English website and partner universities' websites, providing information to a wide demographic community extending beyond participating students. Moreover, to assist partner universities with the possibility of credit transfers, the Institute uses a Study and Research Plan/Record as well as a grade management system showing strong commonalities between partner universities.



Summer Program student discussion

■ Promotion of a Student-Friendly Environment for International Exchange

○ Preparations to support outgoing Japanese students

The project has established an English intensive course to boost the language skills of students wishing to study abroad. It also academically advises students through the appointment of study abroad advisors at each partner university. While studying abroad, the project offers academic consultation and advice by email on everyday living, as well as advice by career advisors.

○ Support structure for incoming international students

In addition to posting program content on its website, the project is working toward the smooth acceptance of international students through close communication with partner universities. While in Japan, international students are provided with Tokyo Institute of Technology tutors (students in related fields), advice from career advisors, and 24-hour counseling.

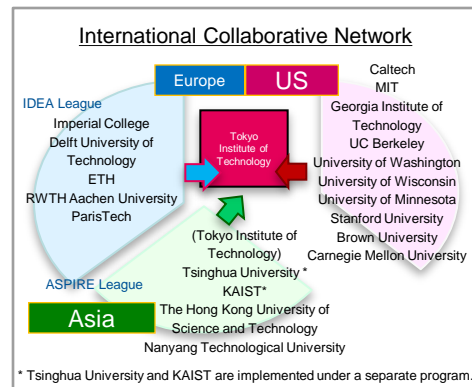
■ Student Mobility

○ Outgoing Japanese students

The project sent 12 students to several of the 16 partner universities in 2013 and plans to annually send one student to each of the 17 partner universities from 2014 onward, under the framework of either the Summer Program, the Joint Educational Program or the Short-term Visitor Program.

○ Incoming international students

The project accepted 25 students in 2013 and will continue to annually accept one student from each of the 17 partner universities, under the framework of either the Summer Program or the Joint Educational Program.



	2011	2012	2013	2014	2015
Outgoing students	n/a	22	20	17	17
Incoming students	n/a	17	25	17	17

Note: FY2011-2013 results, FY2014 -2015 forecast