

Initiatives & Programs for International Education at Tohoku University

By Junichi HIRATA



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Photo: Tohoku University

Tohoku University Main Building (Katahira Campus)

As globalization spreads quickly in the 21st century, universities which mainly conduct educational and research activities are also faced with a wide variety of challenges, caused by rapid environmental changes.

Among these challenges, to cultivate highly skilled human resources on a global scale, who fit the needs of society, is one of the most important missions for the universities, as is also the case with Tohoku University.

Tohoku University President Akihisa Inoue has developed Tohoku University Action Plan “Inoue Plan 2007” setting specific action plans in five key areas – education, research, social contribution, campus environment and organization/management – to help Tohoku University develop into a world-class university capable of playing a leading role in promoting the advancement of human civilization.

In the plan under the education section, “Promote Internationalization of Education” is set as one of the core pillars.

We are promoting our initiatives and programs for international education based on this and I will introduce some of them below.

Brief Introduction

Tohoku University is a research-oriented university located in Sendai – the “City of Trees” – in the heart of the Tohoku (northeast) region of Japan. The university was established in 1907 as Japan’s third Imperial University. It became the first Japanese university to accept female students. The university has become one of Japan’s leading universities, with 10 faculties, 16 graduate schools, three professional graduate schools, five research institutes, and affiliated research and education centers. The number of students enrolled at Tohoku University is approximately 18,000 including 1,500 international students, and the number of academic and administration staff is approximately 5,900 including 160 foreign researchers.

Under its “Research First”, “Open-Door” and “Practice-Oriented Research and Education” principles, Tohoku University aims to establish itself as an internationally recognized university and research center by producing top-class research, while nurturing highly-specialized human resources who are rich in humanity and capable of leadership that will contribute to knowledge and the advancement of society from an international perspective.

The university is a member of various international university consortia, such as APRU (Association of Pacific Rim Universities), T.I.M.E. (Top Industrial Managers for Europe), and AEARU (Association of East Asian Research Universities). It has academic exchange agreements with 155 institutions on a university level, and 323 institutions on a department level. There are nine liaison offices and four overseas offices, including Japanese Inter-University Russia Office. As for degree courses taught in English, three undergraduate and 13 graduate courses are offered, and several international exchange programs such as JYPE, IPLA, COLABS and Summer Programs (TSSP / TASP / TESP) are also implemented in English.

Tohoku University hosts the Advanced Institute for Materials Research funded by the Japanese Ministry of Education, Culture, Sports, Sciences and Technology’s (MEXT) WPI Program. Twelve projects for the Global COE Program and two projects for the Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST Program) have been selected, sponsored by MEXT.

We rank 3rd worldwide (1st nationwide) in citation rankings in material science, 10th (2nd) in physics and 20th (6th) in chemistry.

Degree Courses Taught in English – “Future Global Leadership Program (FGL)” Funded by MEXT as “Global 30 Program”

Tohoku University was selected for the governmental educational program “Global 30 Program” funded by MEXT as one of 13 such universities in 2009.

Under the “Global 30 Program” the universities are supposed to offer degree courses in English and improve the environment for international education. Tohoku University offers 16 such courses in total – three undergraduate courses and 13 graduate courses – as the “Future Global Leadership Program (FGL)” outlined in the [Table](#).

The program offers a wide range of courses in various disciplines such as science, engineering, agriculture, medicine and so forth, providing students with the opportunity to study within specialized domains while also offering various elective subjects. Tohoku University’s world-class research is the foundation of its high-quality education, and provides students with rich research and learning opportunities.

Besides providing the courses, we are improving support systems for international students. We have established the President Fellowship Scholarship for excellent international students and opened “University House Sanjo Dormitory” while construction of other housing facilities such as “University House Sanjo Dormitory II” and “Tohoku University (Katahira) Foreign Researcher Dormitory” is also underway. In these dormitories, international and Japanese students live together, which enables them to experience cross-cultural contact.

Non-Degree Courses Taught in English

Tohoku University also offers non-degree courses taught in English. These programs are the “Junior Year Program in English (JYPE)” and “International Program in Liberal Arts (IPLA)” for undergraduates, and “Cooperative Laboratory Study Program (COLABS)” for graduates. The students enrolled in our overseas partner universities are eligible to apply for these programs.

JYPE offers an opportunity for overseas students to take science, engineering, and agricultural science courses at Tohoku University, without having to attain Japanese language proficiency. All lectures are held in English and course credits will be given by the standards for the equivalent courses. The core (required) course of

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English courses under the “Future Global Leadership Program(FGL)”

Undergraduate Courses	International Mechanical & Aerospace Engineering Course - Undergraduate	Bachelor
	Advanced Molecular Chemistry Course	Bachelor
	Applied Marine Biology Course	Bachelor
Graduate Courses	International Doctoral Program in Engineering, Information Sciences & Environmental Studies	Doctor
	International Post-Graduate Program in Human Security	Master & Doctor
	International Graduate Program for Advanced Science (IGPAS)	Master & Doctor
	International Course of Life Sciences	Master & Doctor
	International Program for Environmental Sustainability Science (IPES)	Master & Doctor
	International Mechanical & Aerospace Engineering Course - Graduate (IMAC-G)	Master & Doctor
	International Materials Science & Engineering Course	Master
	IT & Science Course	Master
	Interface Oral Health Science Course	Doctor
	Network Medicine Course	Doctor
	Basic Medicine Course	Master
	International Program in Economics & Management (IPEM)	Master & Doctor
	International Graduate Program in Language Sciences	Master

Source: Tohoku University

this program is the individual research training course, where students will conduct research, with the support of research groups to which the students are assigned, in a current topic related to their field of studies. The program also offers courses on Japanese language, culture, and society aimed at promotion of understanding of Japan's language and social customs. Cultural and intellectual exchange with Japanese students is an integral part of the program. This will be accomplished through class work as well as participation in the various activities of research groups.

IPLA offers a Liberal Arts curriculum taught in English. The program also offers Japanese language and culture classes in order to provide students with an understanding of the Japanese language and customs. Participating students are required to take an independent study class along with a seminar where they report their study progress and receive feedback from their colleagues. Some advanced students may take graduate level classes offered at Tohoku University. After completing the program, IPLA students will have an expanded global experience and an understanding of the Japanese language and perspective.

COLABS offers graduate-level and research-oriented scientific research training in the assigned research laboratory as well as basic education courses taught in English at Tohoku University in order to increase students' ability to expand their activities into new science fields, without having to attain Japanese language proficiency. A rather broad set of thematic fields is set to let international students study in new, interdisciplinary, scientific fields. The program focuses on the course of individual research training in the laboratory. The program also offers courses on Japanese language, culture, and society aimed at promotion of understanding of Japan's language and social customs, which contributes to developing human resources for global society.

Summer Schools Taught in English

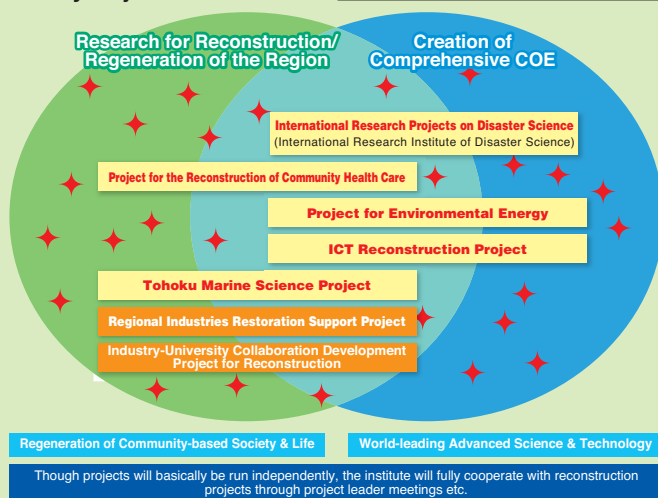
Tohoku University offers the “Tohoku University Science Summer Program (TSSP)” designed to inspire and challenge undergraduate students from partner universities in the fields of science and engineering which covers a wide range of topics in science, technology and social sciences in a lecture series. TSSP provides various activities in which participating students meet with Tohoku University students and local residents to exchange ideas and thoughts on the world we are living in today. Each experience deepens the students' understanding of Japan from a variety of different perspectives as well as enriching their academic experience.

We also offer summer schools named the “Tohoku University Arts and Letters Summer Program (TASP)” for undergraduates of social sciences and

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Projects under the Institute for Disaster Reconstruction & Regeneration Research

Priority Projects of the Institute ◆ Tohoku University Reconstruction Action 100



humanities, and the “Tohoku University Engineering Summer Program (TESP)” for graduates majoring in engineering.

These summer schools are designed to train overseas students in their own academic fields under interdisciplinary and culturally diverse settings.

Future Perspective of International Education

As a world-class university, it is our mission to foster human resources who can play active roles on a global scale in an internationalized society. To carry out this important mission, Tohoku University must continue to do its best to develop educational and research initiatives, making utmost use of our educational and research capabilities.

In closing, I would like to introduce Tohoku University's most recent initiative following the Great East Japan Earthquake on 3.11, 2011.

Though Tohoku University was also affected by the disaster, we quickly restored our basic educational and research functions to start our new academic school year, only delaying one month beyond normal (as was mostly the case with Japanese universities located in the eastern region of Japan, including Tokyo metropolitan area universities). Using this opportunity, we would like to express our appreciation to our colleagues and friends throughout the world for their warm support for our restoration process.

Just after the disaster, Tohoku University established the Institute for Disaster Reconstruction and Regeneration Research headed by our president to contribute to the reconstruction / regeneration of the region, and create a worldwide, comprehensive center of excellence for disaster reconstruction. As a core university based in the disaster area of the Great East Japan Earthquake, Tohoku University engages systematically and strategically in research, education and societal contributions for the revitalization of the region, and transmits and puts research results into practice under the institute. We established a sixth new research institute called the “International Research Institute of Disaster Science (IRIDS)” under this initiative to implement international and interdisciplinary disaster science projects. (Chart)

We are integrating these new initiatives to promote the international education introduced here.

Our door is open and you are more than welcome to study and work at Tohoku University!

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Junichi Hirata is currently head of the International Exchange Division of Tohoku University. His specialty is university administration and public finance.