Offering diverse support to meet the needs of the times

# **Educational programs designed to stimulate** the intellect for the next generation

## Program for Leading Graduate Schools: Inter-Graduate School Doctoral Degree Program on Science for Global Safety

The Inter-Graduate School Doctoral Degree Program on Science for Global Safety develops human resources through integrated education in the 5-year doctoral program across departments at the University for students in the humanities, sciences and technologies. It develops top leaders in the area of global safety who have a substantial knowledge of liberal arts, international adaptability, high sense of moral, and a clear vision, and are able to think and act appropriately on this basis. They are expected to make contributions to the protection of human lives, societies and industries from global disasters such as the Great East Japan Earthouake.

In this program, interdisciplinary cutting-edge education and research are conducted on the basis of "practical disaster prevention studies" in the International Research Institute of Disaster Science (IRIDeS), with participation by the Graduate Schools of Science, Engineering, Environmental Studies, Arts and Letters, etc., so that this integrated program can combine knowledge from the natural sciences, social sciences and liberal arts. This program aims to develop excellent human resources with core specialties, an ability to apply them in various areas, and other required abilities for leaders, through activities at recovery sites from the Great East Japan Earthquake and conducting world-class researches.



Model of excellent human resources in multiple areas (like a confeito)



## **Preparing Future Faculty Program for graduate students**

The Tohoku University Preparing Future Faculty Program (Tohoku U. PFFP) cultivates the skills required of university faculty in graduate students who aspire to become faculty, postdoctoral fellows, and researchers. New faculty can feel confusion and stress because of the broad range of their duties, which encompass teaching, research, management, and social contribution. To ensure that faculty can develop their early careers smoothly, the program fosters the acquisition of the necessary skills and knowledge.



Lecture at GSI Teaching & Resource Center (intensive course at UC Berkeley)

## **Fukkou University Alliance / Training and Education for Future Fukkou Leaders**

"Fukkou University Alliance" was established by member institutions of The Academic Consortium of Sendai to support in the FUKKOU (meaning "reconstruction") from the unprecedented Great East Japan Earthquake of 2011.

Tohoku University offers six courses in the Training and Education for Future Fukkou Leaders Program: "Politics for FUKKOU," "Economics for FUKKOU," "Sociology for FUKKOU," "Thoughts for FUKKOU," "Socionce of Living for FUKKOU," and "Science and Technology for FUKKOU" for students of the member universities. This program aims to develop human resources that are able to deal with problems new to them such as in the case of natural disasters, in a swift and flexible manner, on site. They are expected to take the leadership in FUKKOU from disaster anywhere in Japan or in the world. This program offered a public lecture to the general public on February 2013, with an audience of 447 in total (including multiple counts).



Field study of "Thoughts for FUKKOU" course in Natori City, Miyagi Prefecture





Educational Excellence

Scene from lecture in "Science and Technology for FUKKOU" course

## **Open Campus**

Tohoku University holds an "Open Campus" for two days around the end of July every year. Each faculty and graduate school of the University provides model classes, simulated experiments, facility tours, and other events. A lot of individuals or groups of students from high schools who are interested in attending the University, or their parents, visit the Open Campus. In 2012, 57,445 people (including multiple counts) visited the Open Campus during the two days. This number was the third largest among all the universities in Japan, and first among the national universities (according to "University Ranking 2014," Asahi Shimbun Newspaper Publishing). In 2013, a total of 61,600 (including multiple counts), exceeding the number for last year, came to the Open Campus.







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# Educational programs designed to stimulate the intellect for the next generation

## **University Contribution Award in Education**

The purpose of this award is to recognize those who have shown excellence in the liberal arts curriculum at Tohoku University through improvements in classroom teaching, educational methods and instructional skills. This award honors faculty members who have attained exceptional success in their classrooms or with their educational methods as well as those who have achieved positive results with their original and innovative methods of teaching. The awards ceremony was held on January 7, 2013.



Professor Mitsuru Haga

Center for the Advancement of Higher Education

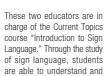


Associate Professor Masatoshi Koizumi



Associate Professor Jo Matsuzaki

Graduate School of Arts Miyagi University of and Letters Education



of sign language, students are able to understand and empathize with persons who are hearing impaired. This long-continuing course has great social significance and students who have taken this course all have high praise for the alexance.

## **Presidential Prize for Educational Excellence**

the quality of all fields of study.

The Presidential Prize for Educational Excellence is given to faculty members who have shown excellence in teaching that has been carried out with sincerity and passion in accordance with the educational principles of Tohoku University. On March 27, 2013, an awards ceremony was held at the Sendai Gymnasium.



School of Dentistry

### Toshihiko Suzuki, Assistant Professor

In addition to giving lectures and practical training in anatomy to students, Professor Suzuki has successfully created a new nextlevel achievement system for students to raise their ability to resolve problems proactively. He has also worked to identify victims of the Great East Japan Earthquake of 2011 and has relayed his experiences to his students. He has made an immense contribution to education in disaster medicine and has an excellent reputation with his students.



## Graduate School of Information Science Information Literacy Education Program

This project supports programs at the elementary and secondary school levels and actively sponsors public lectures for the general public so that they will be able to use Information and Communication Technology (ICT). While making a contribution to society, this program allows graduate students interested in a career in information education to gain practical experience.



## Center for the Advancement of Higher Education Mitsuru Haga, Professor

In the Future Global Leadership Program, Professor Haga has applied his remarkable language skills to promote understanding between Japanese and international students in a learning environment with cultural and linguistic diversity. His classes involve acquiring a multifaceted approach to thinking and have received high praise from students.



## "v-QI School" Graduate School of Engineering

The "v-QI School" is part of the Global Center of Excellence (COE) educational program. Participation in the structure, planning and management of the "v-QI school" (sphere for conducting interdisciplinary, international, industry and academic research) has fostered human resources who are extremely creative and can resolve a variety of research problems through a challenging and interdisciplinary approach, thus making a major contribution to the doctoral program at Tohoku University.



### Steering Committee "Exploring-Germination-and-Growth Program for Young Scientists" (EGGS)

This educational program for high school students nurtures them to become scientists for the next generation. This program has received wide acclaim for its use of interactive programs and has become a model for successful collaboration between high schools and universities. Also, many of the students who have completed this course decide to enroll at Tohoku University.

## Activities that have been designated "Joint Usage/Education Center"

In the program, the University and other universities jointly work at the "Joint Usage/Education Center," to offer a high quality of education to respond with the needs of society and universities using human and physical resources of the University. This program was created in 2009 by the Ministry of Education, Culture, Sports and Science (MEXT) to make it possible for one university to share its best human resources in various fields with other universities. In addition to the Center for the Advancement of Higher Education, Tohoku University has two other centers that have received certification by MEXT.

#### Research Center for Marine Biology, Graduate School of Life Sciences

The Research Center for Marine Biology located in Aomori City was established in 1924 and since then, has been a place where undergraduate and graduate students in marine biology from various universities throughout the Tohoku region come to gain practical experience. The center also cooperates with universities to carry out maritime training. It has been carrying out world-class research on the abundant marine life in Mutsu Bay. It also holds various educational programs in marine life for undergraduate and graduate level students so that they can observe marine life in its natural environment and carry out experiments in its original state. In addition, the center sponsors activities for the general public and children to educate them about marine life.



### **Kawatabi Field Center, Graduate School of Agriculture**



The Kawatabi Field Center, Located in the city of Osaki in Miyagi Prefecture is the largest farm in Japan that is affiliated with a university. This farmland covering an area of 2,200 ha consists of a variety of natural features that include mountainous as well as lowlying regions. The landscape is a unique mixture of forests, grassland, and farmland. Cultivated farmland, grassland and forests do not exist in independent ecosystems but instead share water and nutrients in a circulatory system with a variety of flora and fauna living in coaction in a complex arrangement, making this farm an ideal place for conducting a variety of advanced agricultural research. As a "Joint Usage/Education Center," Kawatabi Field Center offers students a place to learn first-hand about "food," one of the basic needs of human beings, and about "farming" and the "environment" where food is produced. In addition, it carries out educational activities for the general public and children.

## Advanced information technology in education

The Information and Computer Literacy (ICL) classroom and Computer-Assisted Language Learning (CALL) classroom are located in the Multimedia Education and Research Complex at the Kawauchi-Kita Campus where mainly first and second year undergraduate students study. Over 800 computers are available for use and a variety of services are provided for students and liberal arts curriculum.

The "Basic Information Science" course in liberal arts curriculum is taken by all students and is used to improve academic and social skills. The course is designed to fit all students regardless of their major. In order to acquire foreign language skills, various kinds of e-learning jobs are provided and students can access these materials not just from the CALL classroom but from home as well, thus creating an excellent learning environment.



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