Global GIGAKU
Changes the world

Top Global University Project
The Education Program for Innovative Global Engineers
～Toward development of an integrated global campus with collaboration between industry, academia, and government～
Producing practical engineers to meet the needs of global society

On Oct 2014, our project “The Education Program for Innovative Global Engineers ~ Toward development of an integrated global campus with collaboration between industry, academia, and government ~” was selected as one of Top global universities. We have been promoting globalization of not only in our university but also in local area.

Our university is constructing a globally fused campus, aimed at overseas development of education and research based on our interdisciplinary and active international exchange results and science of technology and also has been acknowledged by business as a university to lead the globalization of Japanese society.

Ahead of other universities, our university has developed and implemented educational programs including its twinning program and the double degree program. Moreover, it has energetically accepted international students. Since 1990, we have actively sent many students forth to foreign corporations for six-month periods and let them experience business overseas.

Further efforts will be undertaken to cultivate the development of practical engineers who will create innovation in global fields and participate in the globalization of Japan’s small and midsize companies through the GIGAKU educational research network and GIGAKU techno park network, to develop and construct long-term KOSEN (Colleges of Technology) and Nagaoka University of Technology system and industry-university collaborative systems in foreign next-generation strategy areas, which we have established to date based on the science of technology and which could not have been conducted by other universities. Thank you in advance for your continued support.

Top Global University Project Overview

To improve the international competitiveness of Japan’s higher education, we aim to promote radical internationalization through collaboration with outstanding universities overseas, through university reform, and through leading intensive support combined with system reform to top universities doing education and research at a world-class level or global universities leading internationalization.

Type A [Top type]
Top Type is for world-class universities that have the potential to be ranked in the top 100 in world university rankings

Type B [Global Traction Type]
Global Traction Type is for innovative universities that lead the internationalization of Japanese society, based on continuous improvement of their current efforts

Nagaoka University of Technology (NUT), Chiba University, Tokyo University of Foreign Studies, Tokyo University of the Arts, Kanazawa University, Toyohashi University of Technology, Kyoto Institute of Technology, Nara Institute of Science and Technology, Okayama University, Kumamoto University, Akita International University, The University of Aizu, International Christian University, Shibaura Institute of Technology, Sophia University, Toyo University, Hosei University, Meiji University, Rikkyo University, Soka University, International University of Japan, Ritsumeikan University, Kwansei Gakuin University, Ritsumeikan Asia Pacific University

Type B (Global Traction Type), List of Selected Universities

The University leading the Innovative Global Engineering Education with Strong Network among World-leading Strategic Regions in the Next-generation.

GIGAKU Education and Research Network

Integrating Global Campus with Collaboration between Industry, Academia and Government

Europe
Technical University of Darmstadt, University of Guanajuato, University of Monterrey, etc

Asia
Hokkaido University of Science and Technology, Mongolian University of Science and Technology, etc

North America and Latin America
Nagaoka University of Technology, International GIGAKU Park Foundation

Super GI-net (video conference system)
NUT installed Super GI-net, a video conferencing system that can support lectures and meetings by connecting multiple locations and share information among bases.

GIGAKU = Science of Technology
Natural Science represents scientific approach to natural phenomena. In contrast, GIGAKU (Science of Technology) represents scientific approach to technology.

Nagaoka University of Technology aims to establish itself as an indispensable member of global society, a university which creates GIGAKU with a proactive approach to social change, produces engineers with practical, creative capabilities and a spirit of service who will lead society into the future, and places emphasis on graduate-level education.
GIGAKU Education and Research Network

Developing globally-minded human resources by free movement between the campuses, NUT is producing engineers who learned basic GIGAKU to the world.

By improving and establishing strong network among overseas regions, NUT is producing practical engineers who meet the needs of global in this world.

Providing educational environment that matches students' purpose by free movement between the campuses.

Increase in number of international students' internship and dispatch.

On the understanding different culture, cultivating innovative global engineers addressing the needs on global stage.

Producing practical engineers who learned basic GIGAKU and will play leading role in manufacturing (MONODZUKURI) in overseas strategic regions.

Improve overseas bases for cultivating practical global engineers and forming a network between bases.

NUT is aiming to promote GIGAKU Education and Research model at the next-generation strategic regions and improve overseas bases for cultivating practical global engineers and form a network between bases.

Program for cultivating practical global engineers

In order to develop GIGAKU education and research programs for cultivating practical engineers worldwide, we are implementing a range of collaboration programs for undergraduate students to develop double degree program, joint degree program, twinning program, and practice training at overseas base schools to promote the improvement and expansion of settings with companies.

Support for spreading education of science of technology in overseas base schools

To collaborate with universities in strategic areas throughout the world and spread education based on science of technology, we aim to support program inception and instruction of faculty in overseas base schools and improve overseas bases for cultivating practical global engineers.

In anticipation of rapid development, they will be developed at strategic areas throughout the world, to which Japanese-associated companies are progressing.

Establishment and support of Overseas KOSEN

We support the establishment of KOSEN course education based on GIGAKU education in overseas. e.g. University of Guanajuato KOSEN course.

Establishing overseas KOSEN

Establishment and support of graduate school providing education based on GIGAKU education in overseas.

e.g. Vietnam Japan International Institute for Science and Technology (VJIIST)

GIGAKU Education

Developing globally-minded practical engineers

This type of education fosters engineers with a certain general foundation for expertise and high power of execution for solving problems by introducing practical training methods into long-term education for 15-years-old high school students to the master’s (or doctoral) level.

Long term education of practical engineers

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Ongoing countries and regions as of September, 2015.

- Vietnam
- Thailand
- Malaysia
- Indonesia
- Myanmar
- Sri Lanka
- India
- Germany
- Czech Republic
- Spain
- Mexico
**GIGAKU Techno Park Network**

**Object & Effort**

**Promoting Industry-Academia-Government Cooperation Model at overseas strategic regions and establishing GIGAKU Techno Park**

Using integrated global campus in strategic regions each other, we make possible to foster innovative globally-minded human resources and practical engineers. In addition, international joint research projects promote the globalization of local small-medium enterprises.

**Integrated Global Campus**

Integrated Global Campus developing with GIGAKU Techno Park Network

We aim to construct an integrated global campus at each strategic area by combining industry-university-government cooperation projects and science of technology practical education through Techno Parks that have been developed globally. Especially, we intend to develop international joint research, put research results into effect, apply the results to product development, and promote multiple dispatch of students and faculties.

Providing opportunities for Japanese SMEs to meet global society needs
Cultivating innovative human resources and global practical engineers
Cultivating and introducing human resources meeting company’s needs and practical engineers
Using integrated global campus in overseas strategic regions each other
Industrialization of technology by international joint research

**Education Utilizing GIGAKU Techno Park**

**Engineering education utilizing GTP for students and enterprises**

Japanese students and international students experience improvement in their research using company facilities and internships, and GTP provides support to realize re-educating and earning credit for SME engineers in overseas base universities.

**International Collaborative research**

**Industry - Academia Collaboration research projects in each strategies country**

With our ability to develop industry-university research, we investigate national and international companies' needs and technological innovation to realize industrial innovation through global joint research with companies.

**Globalization of Local SMEs**

**Globalization of Japanese SMEs (Small - Medium Enterprises)**

We support globalization of Japanese SMEs and creation of ventures. Especially, we support overseas practical training for SME engineers and internship for students with overseas GTP and base universities.

**GTP Office**

Mongolia, NUT Office (Mongolian University of Science and Technology)

Mexico, GTP Office (University of Guanajuato)

Vietnam, GTP Office (Hanoi University of Science and Technology)

Malaysia, Universiti Sains Malaysia - NUT Joint Office

Thailand, Chulalongkorn University - NUT Joint Office

GTP Office (University of Deusto Mondragon)