



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 ~

NAGAOKA

Global GIGAKU Changes the world

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 and local 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.



President
Dr. Nobuhiko Azuma

Goal of University Planned and Results

- Establishing global network and supporting globalization of companies, and expanding overseas internship (enterprise and laboratories) and accepting students of internship and dispatch for Twinning or another programs.
- Cultivating Global communication skills by learning together with overseas students from around the world, faculty, engineers, and people in companies in the same campus.
- Realizing long-term overseas internship and study abroad for research at a foreign universities by the time they complete the master's program.
- Producing Japanophile engineers with GIGAKU spirit and faculty of partner universities in the world, and supporting spread of GIGAKU education in each countries.

Our Image by Achieving the Vision

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

Elements of the Vision

Promoting KOSEN-NUT Education and Research Model in the next-generation strategic regions and establishing

GIGAKU Education and Research Network



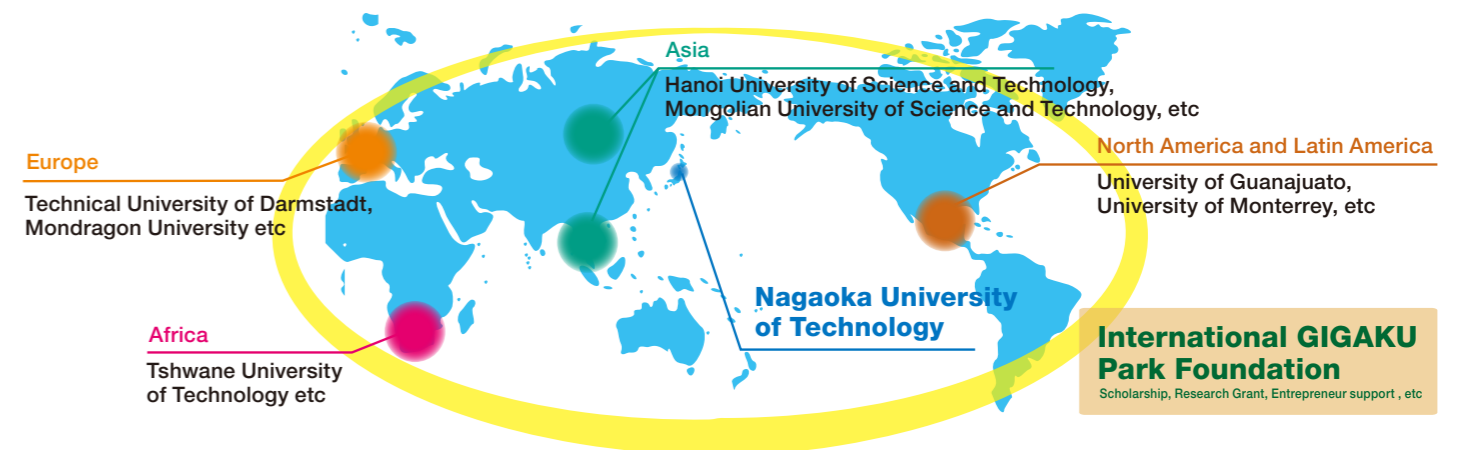
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Promoting Industry-Academia Cooperation Model in overseas strategic regions and establishing

GIGAKU Techno Park Network.

Integrated Global Campus with Collaboration between Industry, Academia and Government



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.

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

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

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, Kwasei Gakuin University, Ritsumeikan Asia Pacific University



GIGAKU Education and Research Network

GIGAKU Education and Research Network

Object & Effort

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

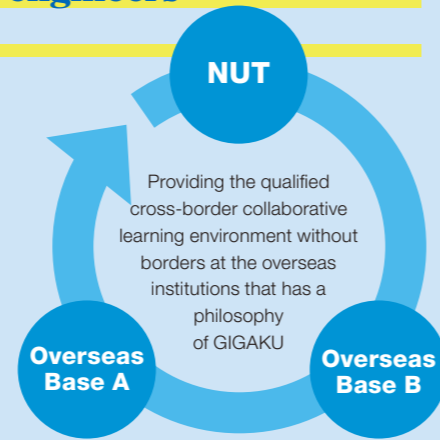
By improving and establishing strong network among overseas regions, NUT is producing practical engineers who meet the needs of global in the world.

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.



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.

Step to GOAL

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

GIGAKU Education

Long - term education of 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 longterm education for 15-years-old high school students to the masters (or doctoral) level.

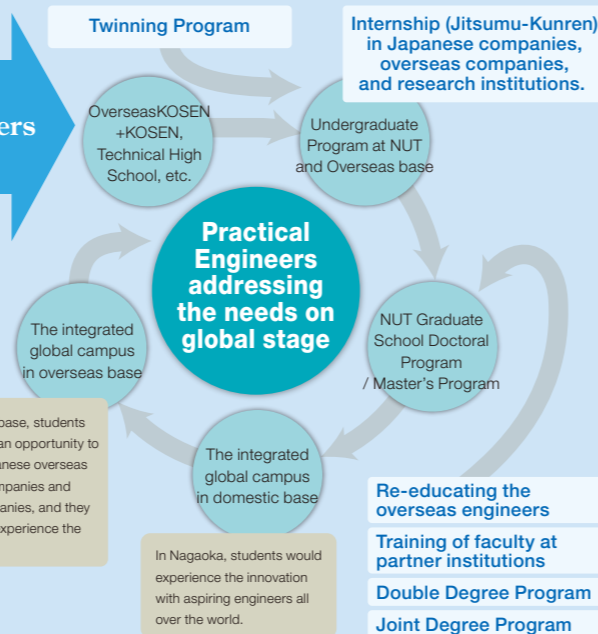
[KOSEN-NUT Education Model] Cultivating engineers from the age of 15

Model of long-term education

Doctoral Program : Three years	5-year Integrated Doctoral Program
Master's Program : Two years	
Latter half of Undergraduate Program(3rd and 4th year) : Two years	
KOSEN (College of Technology) : Five years	High School : Three years
	First half of Undergraduate Program (1st and 2nd year) : Two years

In overseas base, students would have an opportunity to work in Japanese overseas affiliated companies and global companies, and they would also experience the innovation

In Nagaoka, students would experience the innovation with aspiring engineers all over the world.



Educational Program

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 doctors (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.

Double Degree Program

Credit Transfer System

Joint Degree Program

International Graduate Course for Continuing Professional Development

Twinning Program

Internship in Abroad

New program and belonging to this conception
 Ongoing and improving program

Ongoing programs in base countries **DDP: Vietnam, Thailand, Malaysia, Mexico, Korea, Czech**
TP: Vietnam, Malaysia, Mexico, Mongolia, China

Overseas Expansion

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 training methods. We also aim to establish extension campuses overseas in the future.



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

To establish a credit transfer system, we support improvement of the same programs as our university and training methods

We support the establishment of KOSEN at overseas base school

We support teachers at overseas base schools for diploma study

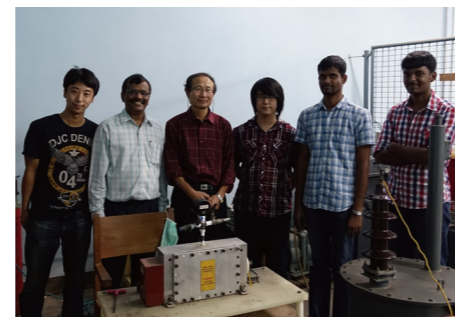
※Ongoing countries and regions as of September, 2015.



Ongoing double degree program in Charles University in Prague (Czech Republic)



The ceremonial signing of agreement with Tshwane University of Technology, South Africa



Overseas Internship in India (Indian Institutes of Technology)



The Minister for Education, Culture and Science of Mongolia and President Dr. Azuma



International conference in Myanmar



Intensive course of Twinning program at Universidad Autonoma De Nuevo Leon, Mexico



GIGAKU Techno Park Network

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 seeds 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

Using integrated global campus in overseas strategic regions each other

Cultivating innovative human resources and global practical engineers

Industrialization of technology by international joint research

Cultivating and introducing human resources meeting company's needs and practical engineers

Education Utilizing GIGAKU Techno Park

Engineering education utilizing GTP for students and enterprises

Japanese students and international students experience improvement in own 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.

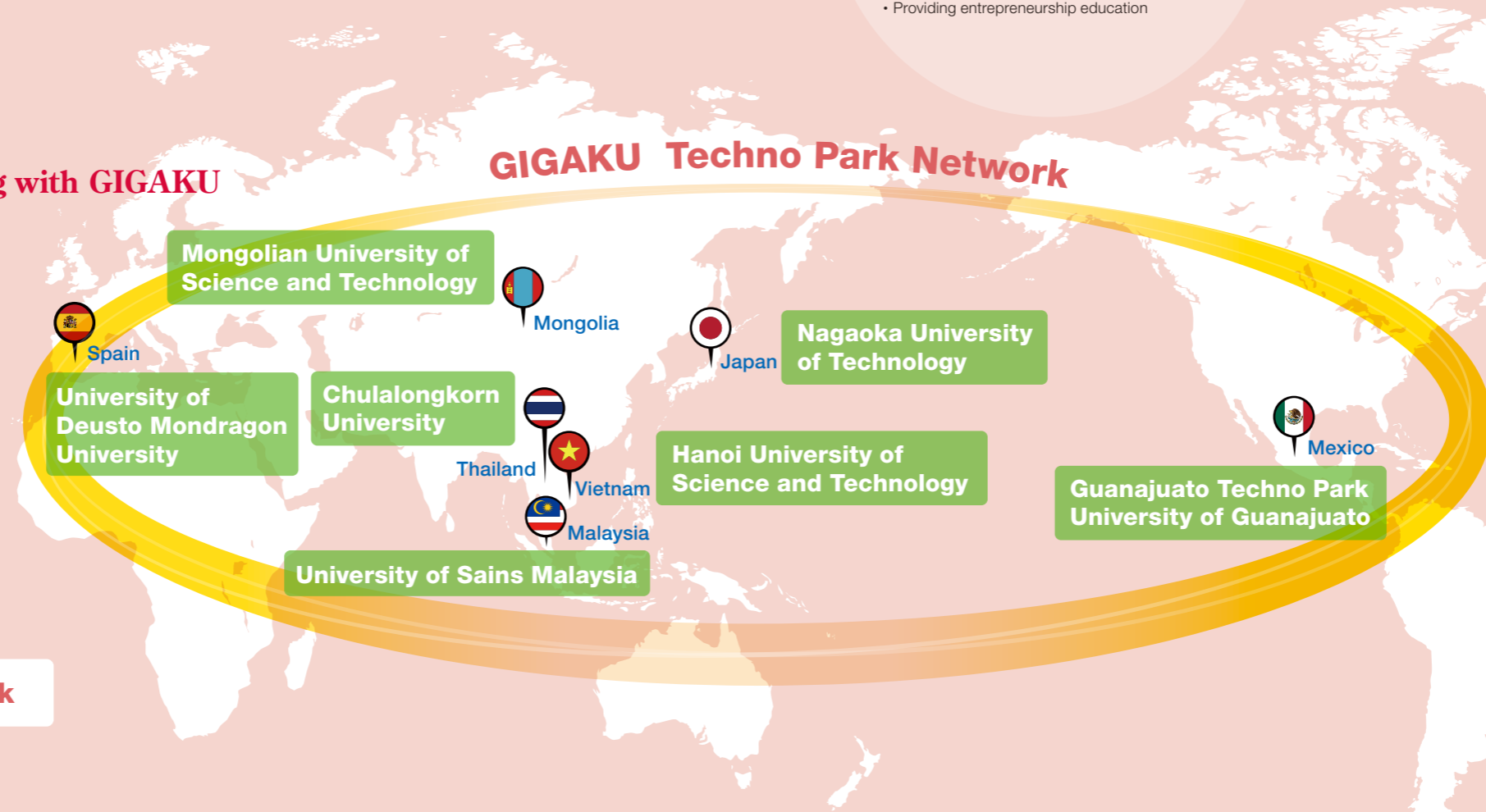


GIGAKU Techno Park Network

Utilizing GIGAKU Techno Park Network linked to strategic regions, GTP actively supports globalization of enterprises.

In GIGAKU Techno Park,

- Exploiting overseas markets
- GTP coordinators support industry-academia activities
- Supporting technological development by GTP strategies
- Providing Engineering Education to students and companies through internal joint research projects
- Providing entrepreneurship education



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)



Thailand, Chulalongkorn University - NUT Joint Office



Malaysia, Universiti Sains Malaysia - NUT Joint Office

