National University Corporation

# NAGOYA INSTITUTE of TECHNOLOGY

# Bulletin 2014

## CHARTER OF NAGOYA INSTITUTE OF TECHNOLOGY

### Fundamental Mission

Nagoya Institute of Technology (NITech) was founded as the first national institution of higher education in central Japan in order to develop the region as Japan's center of industry. Maintaining a respect for this historic mission and acting as one of the leading engineering institutes in Japan, NITech shall therefore make its fundamental mission as follows: developing revolutionary science and technologies, fostering rich human resources, and contributing to peace and social welfare of the future by acting as a source to consistently produce and develop new industries and culture.

### Monozukuri (Innovation)

NITech shall respect practical and creative research activities based on the independent ideas of its members, encourage global academic cooperation, and endeavor to create new values while believing in the unlimited possibilities of engineering beyond the constraints of conventional frameworks of engineering.

### Hitozukuri (Education)

NITech shall devote itself to foster leading human resources whose unique qualities and international minds possess the ability to develop a new science and technologies based on engineering and change the world by exploring, creating, challenging, and taking action.

### Miraizukuri (Contribution)

NITech, as an open institute with a public mandate, shall emphasize harmony and cooperation with local and international societies, and strive to make continuous efforts to realize a peaceful and prosperous society for the future.

Enacted on the 1st of January, 2012

## A MESSAGE FROM THE PRESIDENT

I was appointed as the 12th President of Nagoya Institute of Technology (NITech) on April 1, 2014. I am fully aware of how grave a responsibility it is to head this distinguished institute which has more than 100 years of history and splendid traditions. With the determination to fulfill my duty, I will go all out toward the further development of NITech. I ask for everyone's kind support and encouragement in this endeavor.

NITech dates back to 1905 when Nagoya Higher Technical School was founded. Since then, the industrial community and society in general have come to expect that NITech will, through its education and research activities, develop diverse human resources. Those include leaders who will maintain and innovate Japan's industrial basic technologies, engineering leaders capable of playing an active role in the global arena, and leaders who can develop unprecedented products, services and systems based on their original ideas so as to help create new industries. Ever since its founding, NITech has produced many practical engineers. Respecting this tradition we will not fall into complacency. NITech will continue its tireless efforts to improve and augment its education system, by such means as introducing six-year integrated undergraduate and graduate education courses and creating a new interdisciplinary curriculum.

With outstanding research achievements in many engineering fields, NITech is called a "treasure trove of technologies."

NITech will strengthen both its strategic and systematic research support system and its system to promote cooperation among industry, government and academia. Through synergy between these two systems, NITech aims to serve as an engineering innovation hub, enhance its "brand power" as a research institute, and contribute to sharpening the global competitive edge of Japanese industry.

Since its opening in Gokisogaoka, NITech has continued to evolve thanks to generous support from local industries and the local community. While embarking on a new role on the global stage, NITech remains committed to growing as a unique and attractive institute that deserves support from industry, the local community, and its graduates.

April, 2014

H. Ukai

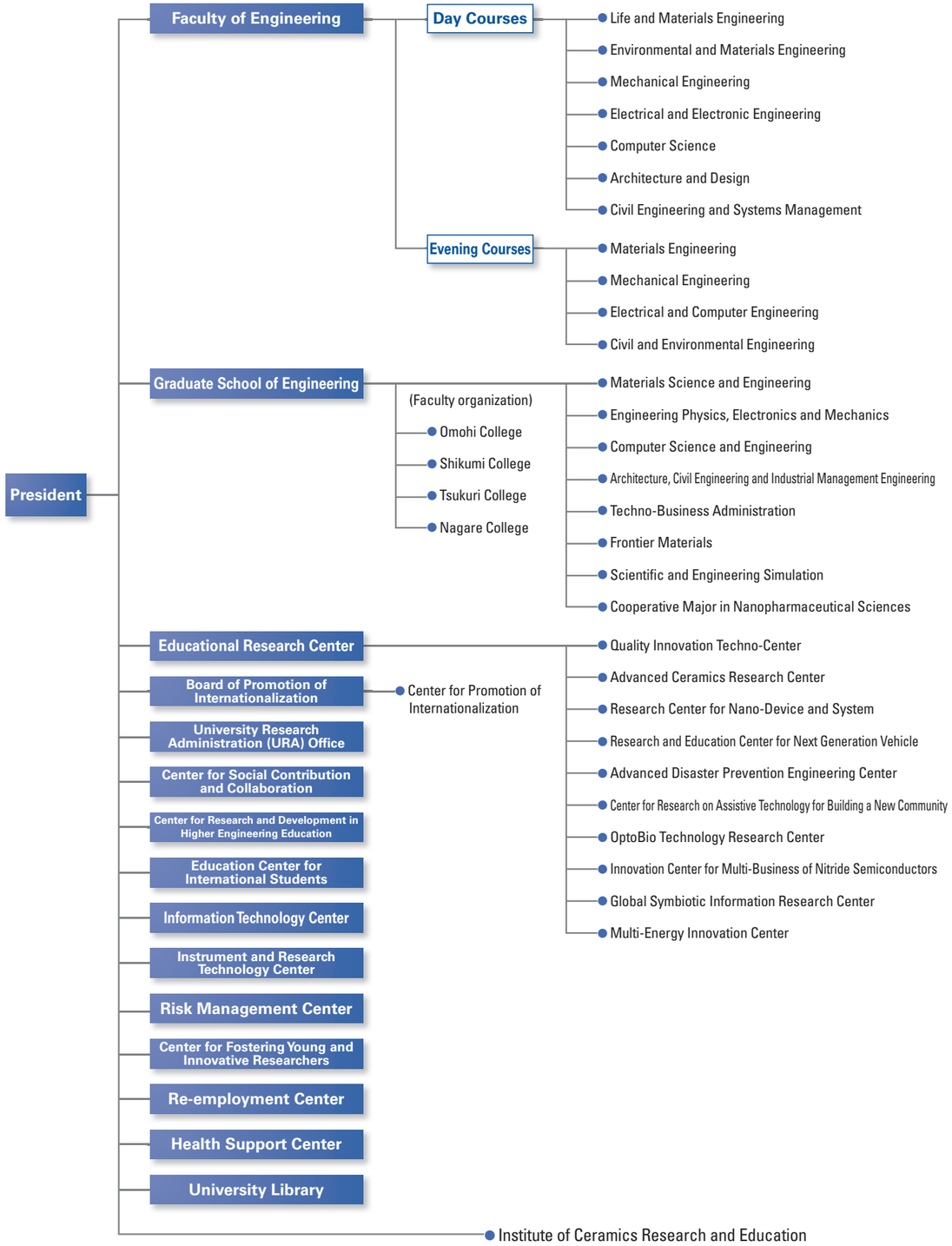
Hiroyuki Ukai

## CONTENTS



## EDUCATION RESEARCH ORGANIZATION

2014.05.01



# OUTLINE OF FACULTY OF ENGINEERING (Day Course)

## Department of Life and Materials Engineering

This department is concerned with diversity of materials and their reactions taking both chemical and biochemical approaches. The goal of the life and materials engineering discipline is to train researchers and technical experts with extensive knowledge and innovative thinking in the field. We offer three programs:

(1) Molecular Chemistry Program

This program provides educational grounds and advanced research on syntheses, structural characterization, reactions, and functions of diversity of materials including natural products and organic and inorganic materials.

(2) Biological Chemistry Program

This program provides educational grounds and advanced research on the structure-function relations of biological materials essential for living organisms and on the development of new functionality based systems through reactions in vivo and functionality assessment.

(3) Biomaterials Program

This program provides educational grounds and advanced research on the functions and the mechanisms for material production in the living system and on the development of novel polymer materials and health-related products applicable in the industrial and medical fields.

## Department of Environmental and Materials Engineering

In recent years, people are becoming more and more concerned with environmental issues such as “recycling” as well as “being environmentally clean”. Today, the means to solve a lot of environmental problems are closely related to technology, including materials science and engineering. Our department has been established for the purpose of developing materials science in harmony with the global environment, and also for the development of environment-friendly materials which we call as “*e-materials*”. Our research fields cover the whole range of materials science, from analytical techniques in atomic scale to innovative processing techniques that are suitable for mass production.

We have developed two professional education programs, the Ceramics Program and the Materials Function Program. In association with our graduate school, regional industries and communities, we strongly expect our programs will turn out great many promising engineers and scientists.

## Department of Mechanical Engineering

The Department of Mechanical Engineering offers a wide-ranging curriculum in the field including Thermal Science and Combustion, Fluid Mechanics, Solid Mechanics, Manufacturing and Material Processing, Mechatronics, Biomechanics, Computational Science and Applied Physics. The Department provides the following three undergraduate programs to foster engineers and researchers with a firm basis in scientific and technological knowledge for mechanical engineering: (1) Fine Measurement Program, (2) Mechanical System Program, and (3) Energy System Program. At the end of the first academic year, students choose one of these three programs. The Department offers educational flexibility for students who wish to target specific disciplines. Students can take credits in other disciplines that complement their individual interests under some limitations. More than 60 percent of all undergraduate students proceed to the graduate school.

## Department of Electrical and Electronic Engineering

The Department offers three distinct programs: Electronics Program, Energy Design Program, and Communications Program. All students are required to select one of the three programs at the beginning of the second year of study. Each program provides students with unique curriculum necessary for an electrical and electronic engineer to meet the current and future challenges of a professional career. All students will obtain a common mathematical and physical foundation, including linear algebra, differential equations, electrical circuits, and electromagnetics. In addition to classroom experience, the curriculum is planned also to provide laboratory experience in electrical and electronic circuits, control systems, electron devices, material physics, electromagnetics, communications, signal processing, and so forth

## Department of Computer Science

The Department of Computer Science offers a wide and attractive curriculum of computer science and information technologies.

Information technologies have become kernel technologies of almost all industries and have formed a central infrastructure of our world.

We provide three programs: (1) Computer Network, (2) Artificial Intelligence, and (3) Multimedia & Human Computer Interaction (HCI).

Each program consists of professional subjects in the forms of lectures, training exercises and experiments.

Before going on to the professional subjects, students learn the basic subjects of the field such as programming, computer hardware and software, algorithms, information theory and mathematics.

After completing our undergraduate courses, students are encouraged to continue further education and research at the graduate school.

## Department of Architecture and Design

Our history dates back to 1905, when the Department of Architecture was established as one of the first institutes of architecture education in Japan.

For over 100 years since then, we have produced many prominent architects and engineers.

In 2004, the design program was inaugurated and the department evolved into a hub for more comprehensive design education, covering not only urban design and architecture but also a wide range of products that facilitate and enhance our daily life.

We are committed to providing quality education ranging from core engineering to humanities in order to promote students’ abilities to create outstanding architectural achievements and epoch-making products which are both functional and beautiful.

## Department of Civil Engineering and Systems Management

Our department offers a choice of two curricular programs, Civil and Environmental Engineering Program and Systems Management Engineering Program.

The aim of the both programs is to educate engineers who are able to solve various kinds of social problems.

The Civil and Environmental Engineering Program provides excellent learning and research facilities in the fields of urban and transportation planning, geotechnical engineering and analysis, seismic evaluation of structure, concrete material and structure, disaster prevention of river and coastal area, conservation of ecology, which includes planning, designing, construction maintenance and operation technologies of social infrastructures. It also aims to educate students to be engineers who can contribute to the formation of more environmental harmonic urban areas with a strong resistance against natural disasters. Graduates of the program can find jobs in a wide range of fields, including national and provincial governments, railway companies, general construction companies, etc.

The Systems Management Engineering Program provides education in management technologies and solving management problems. Based on methodologies for resources (staff, equipment, money, information and time, etc.), quality and technology management, graduates from the program are actively involved in various social and industrial sectors as creative problem-solving engineers.

## Department of Materials Science and Engineering

In the 21st century, it is increasingly important to achieve a good balance between protection of the global environment on the one hand and, on the other hand, continue to make advances in technology and science for the betterment of all. The Department of Materials Science and Engineering focuses on the development of novel materials with the goal of increased functionality and improved properties and characteristics. Our efforts span a wide range of chemical and physical fields, including organic, inorganic, metallic, macromolecular, and bio-related fields. Correspondingly, the Department has five major divisions: Organic Materials; Inorganic Materials; Materials Function and Design; Chemical Process; and Life Function. This Department is a proving ground for efficient scientists and skilled engineers. The graduate students of the Department learn the essence of materials and their diverse applications enabling them to take active roles in various industrial fields.

## Department of Engineering Physics, Electronics and Mechanics

The Department of Engineering Physics, Electronics and Mechanics consists of four divisions: Mechanics, Energy, Fine Measurement, and Electronics. The first three are linked to the Department of Mechanical Engineering within the undergraduate school. Their education and research activities cover all fields of mechanical engineering, including measurements, analyses and simulations in physics. The last one is linked to the Electronics Program of the Department of Electrical and Electronic Engineering within the undergraduate school. Its education and research fields cover device technology and material science in electronics. Postgraduate students in this department learn a broad area from the basics and applied physics to their application in the most advanced mechanical and electronic engineering fields.

## Department of Computer Science and Engineering

The Department of Computer Science and Engineering combines advanced knowledge and techniques from a wide range of fields including mathematics, information technology, computer science, artificial intelligence, artificial life, software engineering, hardware engineering, system control engineering, and speech and image processing.

The department has five areas of specialty: Mathematics and Mathematical Science, Computational Intelligence, Computing and Communications, Systems and Control, Multimedia and Human Computer Interaction.

In these five areas, we offer an education that allows students to follow their own interests within a flexible framework.

While learning, students also have opportunities to get involved in state-of-the-art research. The department also works closely with industry requirements to develop human resources who can contribute to society.

## Department of Architecture, Civil Engineering and Industrial Management Engineering

The main objective of our department is to pursue better space and infrastructure for human life and industries in view of architecture, civil engineering and industrial management. Our approach includes a wide variety of methods such as policy making, planning, structural design, infrastructure maintenance, environmental engineering, construction materials, architecture, production management, logistics etc. The frontier of our field is ever expanding. We also welcome students with multi-disciplinary backgrounds.

Our department currently consists of the following four core divisions. “Human Space,” “Civil Engineering,” “Environmental Engineering and Disaster Prevention” and “Management engineering.”



## Department of Techno-Business Administration

This is the first master course of Management of Technology (MOT) in Japan established in 2003, and has been providing students with a thorough understanding of important issues : Entrepreneurship, Intellectual property, Relationships between market and technology, Regional industrial policies, and Academy-industry-government cooperation for research and development. The course is designed through consultation with a wide variety of experts from academia and industry, and is suitable for any scientist, engineer, or manager with an academic background in engineering or relevant practical experience in industry. The course offers two programs: a one-year master program for those in employment who wish to advance their career, and two-year program for new graduates who hope to improve their skills from the perspective of Technology Management.

## Department of Frontier Materials

A new paradigm in the 21st Century is set to answer energy and resource problems, environmental issues and medical issues. Our Department specifically focuses on the development of environment-friendly, high-performance frontier materials in a wide range of chemical and physical fields relating to chemical conversion, energy conversion, nanotechnology, and life science. The graduate students have research training for advanced theories and technologies in one specialized field selected among Environmental Ceramic Materials, Advanced Energy Materials, and Molecular Life Science and Nanotechnology.

## Department of Scientific and Engineering Simulation

The mission of the Department of Scientific and Engineering Simulation is to study challenging fundamental problems in science and engineering by using high-performance computers, to develop consolidated systems that embody physical and semantic contents of information, to apply to more complex engineering and environmental problems, and also to develop highly advanced software technology. The Department consists of the following three Fields: Field of Computational Applied Sciences, Field of Computer Science and System Engineering, and Field of Simulation in Civil Engineering and Architectural Systems. Students learn theory to acquire software skills and to work closely with staff members from different fields of the Department.

## Cooperative Major in Nanopharmaceutical Sciences

The Department of Nanopharmaceutical Sciences was established in cooperation with the Graduate School of Engineering at the Nagoya Institute of Technology and Graduate School of Pharmacy at Nagoya City University. This department has three divisions: Division for Synthesis of Functional Medicine (fine organic synthesis and biotechnology); Division of Drug Delivery (science of drug delivery, Science of drug dynamics, and Protein engineering); and Division of Nanoengineering for Medicine (nanobioengineering, Biomechanics, and nanoimaging). Graduate students of this department study engineering and pharmacy on an equal basis, and will become core researchers and engineers in various fields of research and development such as new drugs, functional foods, and cosmetics.

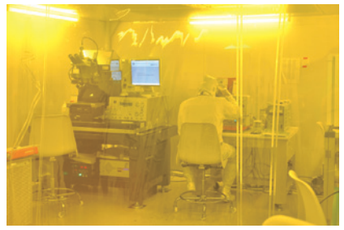
# EDUCATIONAL RESEARCH CENTERS

## Quality Innovation Techno-Center

Quality Innovation Techno-Center was established by a ministerial ordinance in April 2002 to provide advanced practical education on quality innovation not only to students but people already in employment and to carry out research and development on education system of quality innovation. The main objective of this center is to attempt to have young people develop their dreams and ambitions as well as an adventurous and challenging spirit toward Quality Innovation of the 21st century by offering an environment for technical education based on practice intra-extramurally. The following are examples of our activities: Intramural education to further enrich practical education at the workshop for students and graduate students, education for extramural business workers, and technical lectures for junior high and high school students.

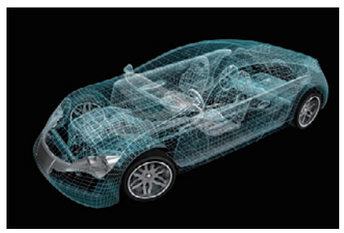
## Advanced Ceramics Research Center

Our mission is the research of fundamental ceramic science and the development of advanced intelligent ceramics for the solution of environmental and energy problems in the 21st century. The Ceramics Research Laboratory (CRL) was established in 1973 and moved to Tajimi-city in 1977. This East-Gifu area's pottery industry has a long history. The CRL has been supporting the industrial research of many companies in this local area. In 2012 the CRL was reorganized into the present center for the purpose of developing intelligent ceramics. Since then it has contributed to ceramic science as well as academic education for research engineers on a worldwide scale. Recently, national projects and collaborations with other organizations and companies have led to excellent academic and technological work in the field of ceramics and related materials.



## Research Center for Nano-Device and System (RCNDS)

The Research Center for Nano-Device and System (RCNDS) was established on April 1, 2003, following the wind-up of a 10-year project—the "Research Center for Micro-Structure Devices"—on March 31, 2003. The purpose of the center is to conduct research on physical properties of materials with a micro-structure (nano-structure) and their application for electronic and photonic devices, taking over research works "Heteroepitaxial Crystal of Micro-Structures", "Basic Characterization" and "Device Fabrication and Its characterization" studied at the previous research center.



## Center for Research and Education of Next-Generation Vehicles

The Center for Research and Education of Next-Generation Vehicles was established to conduct research in the next-generation automobile related field, which integrally solves energy problems and environmental problems, to build up next-generation automobile engineering associated with industries, as well as to provide education regarding next-generation automobile engineering.
As one of its functions, this research center carries out research and development at the Producing Technology Division, Power Control Division and Power Electronics Division.
Another activity is to create education programs utilizing the "Factory Manager's Training workshop", "3D-CAD Engineer School", and resources from the R&D Division of this center.

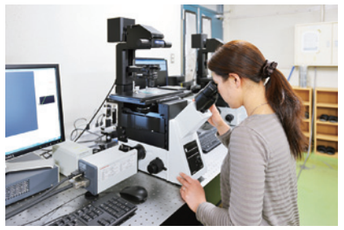
## Advanced Disaster Prevention Engineering Center

Prediction, mitigation and control of huge natural disasters like earthquake, tsunami and typhoon will be the final goal of ADPEC. By clarifying the process and the mechanism of each type of natural disaster and developing various kinds of technologies for use in huge disasters, we aim to establish the world's leading research center for disaster prevention and mitigation.
Meanwhile we will make every effort to help prevent and mitigate huge disasters based on the viewpoint of useful and easily-acceptable technology development. We always keep in mind that technology we develop should be able to make a real contribution to the construction of a sound society that stands strong in the face of a natural disaster.



## Center for Research on Assistive Technology for Building New Communities

The Center aims for continuous and comprehensive research on assistive technology for building new communities in Japan in the 21st century, the era of the aging society. This new community enables people of all generations to cooperate and live happily through the union of engineering, humanities and social sciences.
Activities: One of the aims of the Center is to contribute to continuous and comprehensive research on assistive technology for building a new community in the 21st century of Japan known as "society of the aged". The other aim is to evaluate the quality of assistive technology from the standpoint of building a new community.



## OptoBio Technology Research Center

Life science utilizing optotechnology is a rapidly growing research field. 'Optogenetics' has recently brought outstanding breakthroughs in brain science, while the established 'optical measurement' technique was awarded the Novel prize 2008. The center contributes to our community by creating a new field of industry, which is based on the engineering approach in the life science that is engaged in light reactions. By comprehending the physics of light, and to manufacture bio-inspired new materials, we aim to improve the health-related quality-of-life. The membrane protein rhodopsins, light-driven ion-pump, for instance, which has already been applied in the field of optogenetics, is still to be optimized to give the best performance and safety. We, in three departments, will encourage ourselves to enhance the research activity in tight collaboration, as well as to promote the integration of interdisciplinary research fields beyond the center.

## Innovation Center for Multi-Business of Nitride Semiconductors

The Innovation Center for Multi-Business of Nitride Semiconductors was established as the base of industry-university-government cooperation for developing practical applications of GaN based power devices with NITech's pioneering crystal growth technique to fabricate GaN film on Si substrate. The project realizes energy-saving semiconductors with high added value by taking advantage of the existing production lines of Si devices in collaboration with corporations dedicated to developing equipment for crystal growth and device processing, large diameter and high quality materials, and devices for home appliances, communications, automobiles, etc. The development process of equipment, materials, and devices are permanently-conducted under one roof.

## Global Symbiotic Information Research Center

In recent years, various social problems have been emerging from differences in languages, differences in cultures, differences in values or differences in psychosomatic functions as a result of rapid globalization and social diversification. For example, diplomatic problems based on differences in cultures, historical views and religions increase year by year.
In this research center, we develop information technologies for people to communicate harmoniously and reach agreements while overcoming differences in language, culture, historical views, values, psychological functions etc. In addition, we develop information technologies to remove barriers for impaired people, and support these people to participate fully in society.

## Multi-Energy Innovation Center

The generation of "green" energy is a global concern and quite important especially in Japan. For the green energy generation, various types of energy sources must be available. Thus one of the solutions of the green energy system must be an independent micro energy supply system consisting of various types of energy sources (multi-energy sources) with less energy accumulated, controlled by an intelligent total energy manager, and the parallel development of cheaper and higher performance energy accumulators. At the Nagoya Institute of Technology, research on "generation," "storage," "saving," and "delivery" of energy had been conducted independently. The Multi-energy innovation center was recently established to construct the above-described green energy system based on our own research achievements.

## Center for Social Contribution and Collaboration

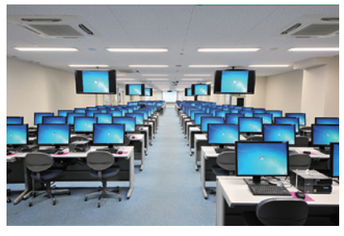
In order to promote and strengthen our industry-academia-government collaboration strategy, this center has been organized into two divisions: the Planning and Administrative Division and the Intellectual Property Utilization Division. The latter has functions such as technology transfer support and practical liaison activities.
As a core organization for promoting NITech's industry-academia-government collaboration project, we aim to enhance the function of our one-stop service, and facilitate further coordination with industry.


## Center for Research and Development in Higher Engineering-Education

The Center for Research and Development in Higher Engineering-Education was established in April 2005 to support the engineering-education system of NITech (Nagoya Institute of Technology). The Center consists of three Offices; "Admission Research Office", "Educational Research and Development Office", "Career Support Office".

## Education Center for International Students

The Education Center for International Students provides international students with a wide range of educational activities/programs, such as Japanese language courses and support regarding the studies and lives of international students.



## Information Technology Center

The Information Technology Center opened in April 2006. This organization provides the information infrastructure for the Nagoya Institute of Technology. The center consists of three sections:
(1) Database administration (2) Course management systems (3) Network management and network security. We are also developing a new system for the administrative offices and education services based on IT technology. We carry out education and research in the areas of computer networks, information media, and computer and network security.

## Instrument and Research Technology Center (IRC)

The main missions of the Instrument and Research Technology Center are (1) management of large-scale instruments for research and (2) promotion of cooperative use of the instruments. The staff carry out (1) research for advanced instrumental analyses and (2) provide support for educations and research in campus and/or industry. The dedicated staff also provide scientific and technical consultation for instrumental analyses.



## Risk Management Center

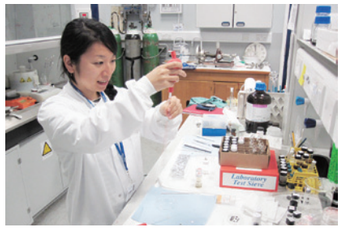
In the event of an emergency or natural disaster, the Risk Management Center of NITech is prepared to act promptly to maintain the essential functions of the university, to protect the lives of students, faculty, staff, and to preserve the property and honor of NITech.
The Risk Management Center handles emergencies, and implements any crisis management action required during times of normal operations. It consists of two sections: the Disaster Prevention Section and the Legal Risk Section.

## Center for Fostering Young and Innovative Researchers

The center was established in June 2009 to train excellent young researchers with the ability to conduct the world's highest level research, to lead research and educational activities in interdisciplinary fields of NITech, and to contribute to stimulating innovative research. For this purpose, the center provides a tenure track system, in which the researchers can receive various support and may be offered a tenure position through a strict and fair review.
This center is administrated by the program "Fostering Young and Innovative Researchers based on Industry-Academia-Government Collaboration" adopted by "Improvement of research environment for young researchers" which is financed by the Ministry of Education, Culture, Sports, Science and Technology, and has been also adopted by the Program to Disseminate Tenure Tracking System (Organizational selection type and Individual selection type) since 2013.
The center's main activity is planning research proposals for interdisciplinary fields and implementing research, fostering and supporting extraordinary researchers, planning criteria for extraordinary researchers, implementing reviews and evaluating their achievements, and the center's PR and its administration. We aim to contribute to fostering young and innovative researchers as a valuable asset.

## Health Support Center

This center deals with not only health support for all the members in the university, but also early diagnosis and treatment, prevention of relapse and onset prevention. Under the School Health and Safety Law together with Labour Safety and Health Law, we organize a health checkup for all workers and students. Anyone can have a personal consultation with medical doctors (psychiatrist, internal physician), clinical psychologist, or nurses. First aid is also available.



## Institute of Ceramics Research and Education

The Institute of Ceramics Research and Education (ICRE) has been established to contribute to the creation of a sustainable society by integrating education research based on ceramics science and engineering. The mission of ICRE is to promote world-level research in the field of ceramics science and foster young researchers who have a global outlook.

## FACILITIES ON CAMPUS

### NITech International House

The purpose of International House is to promote international exchange in education and research, and also to provide accommodations for students and researchers with places to live.

Foreign students may move in April and October, period of stay is within 6 months. Students can have meetings or parties in the lobby or Japanese style room upon request.

## OVERSEAS LIAISON OFFICE

Contact: intpromo@adm.nitech.ac.jp

### NITech Liaison Office in Beijing

The Nagoya Institute of Technology Beijing Office was established in the campus of the Beijing University of Chemical Technology (BUCT) in June 2011 under the Memorandum of Understanding on the Establishment of the Liaison Offices with BUCT. This office is determined to play a central role in China.

### NITech Liaison Office in Malaysia

The Malaysia Office was established in the campus of Universiti Teknologi MARA (UiTM) in March 2013 under the Memorandum of Agreement on the Establishment of Liaison Offices with UiTM as our main base in Malaysia.

### NITech Europe Liaison Office

The third office was established at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) in Erlangen, Germany in July 2013. This office plays a key role in Europe.

**★ Board of Promotion of Internationalization**

The Board of Promotion of Internationalization was organized in April 2013, for the purpose of developing a policy regarding international relations, such as cooperation/exchange of students and research with overseas institutions of higher education.

As a core organization for promoting NITech's internationalization, we shall establish overseas liaison offices, implement projects, facilitate overseas dispatch of students, and develop a global network.



## LIBRARY

As the information center of NITech, the NITech library serves the students, faculty, and staff of NITech by collecting, cataloging, conserving books and other materials, and providing smooth access to them for research, study and education. There are various rooms available.

### Floor Plan

| | |
|---|---|
| **4th floor** | Serials (Technology), Seminar Room |
| **3rd floor** | Serials (Natural Science, Technology, Industry), Study Booths, Seminar Room, Current Serials, NITech University Document Room, International Exchange Corner |
| **2nd floor** | Books (Technology, The arts, Language), Serials (Social Sciences, Natural Science), PC/AV Corner, Media Room, Reading Area, Seminar Room, Regional Collaboration Corner, PC Corner, Stacks, Refresh Corner |
| **1st floor** | Books (Natural Science, Technology, Philosophy, History, Social Sciences, Literature, Industry), Counter, Electronic Resources, Brawsing Corner, Information Corner, Stacks |
| **Basement** | Closed Stacks |

### Opening hours

| | | |
|---|---|---|
| Semester Hours | Monday – Friday | 8 : 45 – 21 : 45 |
| | Sat. – Sun, Nat. Holidays | 8 : 45 – 16 : 45 |
| Vacation Hours | Monday – Friday | 8 : 45 – 16 : 45 |

### The collection

**(as of March 31, 2014)**

| Print | Japanese | Foreign | Total |
|---|---|---|---|
| Books | 260,099 | 211,385 | 471,484 |
| Journals | 2,301 | 3,159 | 5,460 |
| Electric Books | 431 | 19,561 | 19,992 |
| Electric Journals | 591 | 12,177 | 12,768 |

### Library Use in 2013

| | |
|---|---|
| Open Days | 317 Days |
| Users | 290,649 Persons |
| Book Lending | 44,925 Volumes |
| Copying Documents | 2,248 Cases |

### NITech Repository Use

**(as of May 1, 2014)**

| | |
|---|---|
| Items Archived | 3,724 |
| Item Views | 187,142 |
| Item Downloads | 631,498 |

### NITech Repository system (http://repo.lib.nitech.ac.jp)

You can search and read the scholarly literature (doctral dissertation, academic papers etc.) produced at the Nagoya Institute of Technology using the NITech Repository System.

# INTERNATIONAL ACADEMIC EXCHANGE AGREEMENTS CONCLUDED

| | |
|---|---|
| Number of University Partnerships | 53 |
| Number of Department Partnerships | 16 |
| Number of Countiries & Regions | 27 |

☆ About Student Exchange Indicators:
● exchange of students WITH tuition waiver program
○ exchange of students WITHOUT tuition waiver program

**(as of May 1, 2014)**

| Countries & Regions | | Partners | Department Partners | Date Concluded | Program | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | ☆ Student Exchange | Faculty Exchange | Joint Research | Sharing Sci. Material |
| Asia | Afghanistan | Kabul University | | 2005.11.22 | ○ | ○ | ○ | ○ |
| | Bangladesh | Bangladesh University of Engineering & Technology | | 1999. 8.31 | ○ | ○ | ○ | ○ |
| | China | Shaanxi University of Science & Technology | | 1990. 9. 6 | ○ | ○ | ○ | ○ |
| | | Tsinghua University | | 1994.10.10 | ● | ○ | ○ | ○ |
| | | Xi'an Jiaotong University | | 1996.11.18 | ● | ○ | ○ | ○ |
| | | Zhejiang University | | 1997. 2.28 | ○ | ○ | ○ | ○ |
| | | Beijing Institute of Technology | | 1997.10.13 | ○ | ○ | ○ | ○ |
| | | Beijing University of Chemical Technology | | 2005. 2.23 | ● | ○ | ○ | ○ |
| | | The Institute of Carbon Fibers and Composites, Beijing University of Chemical Technology (Advanced Ceramics Research Center) | ○ | 2007.11.21 | | ○ | ○ | ○ |
| | | Tongji University | | 2006. 6. 6 | ● | ○ | ○ | ○ |
| | | Institute of Semiconductors, Chinese Academy of Sciences | | 2007. 5.18 | | ○ | ○ | ○ |
| | | Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences (GIEC, CAS) (Institute of Ceramics Research and Education) | ○ | 2010.11.19 | ○ | ○ | ○ | ○ |
| | | Fudan University | | 2007.12.30 | ○ | ○ | ○ | ○ |
| | | Sun Yat-sen University | | 2008. 5. 9 | ○ | ○ | ○ | ○ |
| | | Sichuan Academy of Social Sciences | | 2008.11. 5 | ○ | ○ | ○ | ○ |
| | | College of Materials, Xiamen University (Dept. of Frontier Materials, Graduate School of Engineering) | ○ | 2009. 1.29 | ○ | ○ | ○ | ○ |
| | | Dalian Neusoft Institute of Information | | 2010. 4.12 | ● | ○ | ○ | ○ |
| | | Changchun University (Library) | ○ | 1995. 1.17 | | ○ | | ○ |
| | | Jilin University (Library) | ○ | 1995. 1.16 | | ○ | | ○ |
| | India | Anna University | | 1996. 9. 5 | ● | ○ | ○ | ○ |
| | | Indian Institute of Technology, Bombay | | 2002. 6.19 | ● | ○ | ○ | ○ |
| | | Central Glass and Ceramic Research Institute | | 2005. 6. 2 | | ○ | ○ | ○ |
| | | University of Delhi | | 2007. 6.29 | ● | ○ | ○ | ○ |
| | | National Institute of Technology, Tiruchirapalli | | 2009. 2.24 | ● | ○ | ○ | ○ |
| | | Institute of Minerals and Materials Technology, Council of Scientific & Industrial Research (Advanced Ceramics Research Center) | ○ | 2013. 8.11 | | ○ | ○ | ○ |
| | | Centre for Photonics and Nanotechnology, Sona College of Technology (Dept. of Frontier Materials, Graduate School of Engineering) | ○ | 2014. 3. 5 | ○ | ○ | ○ | ○ |
| | Indonesia | Udayana University | | 2003.10.14 | ● | ○ | ○ | ○ |
| | Republic of Korea | Hanyang University | | 2003. 3.10 | ● | ○ | ○ | ○ |
| | | School of Electrical Engineering and Computer Science, Seoul National University (Dept. of Computer Science and Engineering, Graduate School of Engineering) | ○ | 2005. 9.20 | | ○ | ○ | ○ |
| | | Myongji University | | 2010. 9.30 | ● | ○ | ○ | ○ |
| | Malaysia | Universiti Teknologi MARA | | 2005. 7. 8 | ● | ○ | ○ | ○ |
| | | Universiti Teknologi Malaysia | | 2006. 6.29 | ● | ○ | ○ | ○ |
| | | Microelectronic and Nanotechnology-Shamsuddin Research Centre (MiNT-SRC), Universiti Tun Hussein Onn Malaysia (Dept. of Engineering Physics, Electronics and Mechanics, Graduate School of Engineering and Dept. of Frontier Materials, Graduate School of Engineering) | ○ | 2012. 8.16 | ○ | ○ | ○ | ○ |
| | Sultanate of Oman | Sultan Qaboos University | | 2003. 3. 5 | ● | ○ | ○ | ○ |
| | Thailand | Thammasat University | | 2004. 3.11 | ● | ○ | ○ | ○ |
| | | Thai-Nichi Institute of Technology | | 2007.10.30 | ● | ○ | ○ | ○ |
| | | Chulalongkorn University | | 2008.11.14 | ● | ○ | ○ | ○ |
| | Taiwan | National Taipei University of Technology | | 2005. 8.16 | ● | ○ | ○ | ○ |
| | Turkey | Graduate School of Science & Engineering, Dumlupinar University (Dept. of Frontier Materials, Graduate School of Engineering) | ○ | 2013. 7. 9 | ○ | ○ | ○ | ○ |
| | Vietnam | Institute of Materials Science Vietnamese Academy of Science and Technology | | 2008. 2.21 | ● | ○ | ○ | ○ |
| | | Hanoi University of Science and Technology | | 2008. 9.18 | ● | ○ | ○ | ○ |
| Oceania | Australia | University of Technology, Sydney | | 1997. 8. 8 | ● | ○ | ○ | ○ |
| | | Australian Institute for Bioengineering & Nanotechnology, The University of Queensland (Dept. of Material Science and Engineering, Graduate School of Engineering) | ○ | 2013. 5.15 | ○ | ○ | ○ | |
| Europe | Austria | Faculty of Architecture and Planning, Vienna University of Technology (Dept. of Scientific and Engineering Simulation, Graduate School of Engineering) | ○ | 2012.10. 1 | ○ | ○ | ○ | ○ |
| | Bulgaria | St. Cyril and St. Methodius University of Veliko Turnovo | | 2013. 9. 2 | ● | ○ | ○ | ○ |
| | Finland | Aalto University | | 2003. 1.31 | ● | ○ | ○ | ○ |
| | France | École Nationale Supérieure de Céramique Industrielle (ENSCI) & Université de Limoges | | 2003. 2.18 | ● | ○ | ○ | ○ |
| | | École Nationale Supérieure de Chimie de Lille | | 2003. 2.19 | ● | ○ | ○ | ○ |
| | | École Françaiss d'Électronique et d'Informatique (EFREI) | | 2006.10. 3 | ● | ○ | ○ | ○ |
| | | École Spéciale des Travaux Publics, du Bâtiment et de L'Industrie (ESTP) | | 2009. 3.11 | ● | ○ | ○ | ○ |
| | | École d'ingénieurs généralistes (ESIGELEC) | | 2010. 3. 8 | ● | ○ | ○ | ○ |
| | | University of Poitiers | | 2010.10. 5 | ● | ○ | ○ | ○ |
| | Germany | Faculty of Electrical Engineering and Information Technology, Chemnitz University of Technology (Dept. of Computer Science and Engineering, Graduate School of Engineering) | ○ | 2006.10.23 | | ○ | ○ | ○ |
| | | Friedrich-Alexander University Erlangen-Nuremberg | | 2011. 3.11 | ● | ○ | ○ | ○ |
| | Italy | The University of Milan | | 2004. 3.30 | ○ | ○ | ○ | ○ |
| | | Department of Engineering & Management, University of Padua (Dept. of Computer Science and Engineering, Graduate School of Engineering) | ○ | 2011. 1.17 | ○ | ○ | ○ | ○ |
| | Poland | Faculty of Computing Science and Management, Poznan University of Technology (Dept. of Computer Science and Engineering, Graduate School of Engineering) | ○ | 2006.12.29 | | ○ | ○ | ○ |
| | Romania | "Alexandru Ioan Cuza" University of Iasi | | 1999. 8.10 | ○ | ○ | ○ | ○ |
| | Russia | Mendeleyev University of Chemical Technology of Russia | | 1991. 5.16 | ○ | ○ | ○ | ○ |
| | Spain | Universidad Politécnica de Valencia | | 2000.11.14 | ● | ○ | ○ | ○ |
| | Sweden | Luleå University of Technology | | 2013.10.14 | ● | ○ | ○ | ○ |
| | United Kingdom | Imperial College London | | 1991. 6. 3 | ○ | ○ | ○ | ○ |
| | | The University of Leeds | | 1991. 6. 4 | ○ | ○ | ○ | ○ |
| | | The Institute of Particle Science and Engineering, The University of Leeds (Advanced Ceramics Research Center) | ○ | 2007.11. 6 | | ○ | ○ | ○ |
| | | The University of Sheffield | | 2005. 7. 8 | | ○ | ○ | ○ |
| North America | U.S.A | University of Arkansas – Fort Smith | | 2007. 5.16 | ○ | ○ | ○ | ○ |
| | | Clemson University | | 2008. 2. 7 | ○ | ○ | ○ | ○ |
| | | University of Florida | | 2010. 7.28 | ○ | ○ | ○ | ○ |
| South America | Brazil | University of Brasilia | | 1999. 1. 7 | ● | ○ | ○ | ○ |

## NUMBER OF INTERNATIONAL STUDENTS

(as of May 1, 2014)

| Countries & Regions \ Classification | Graduate School | | | | Undergraduate | | Research Students | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Master's Courses | | Doctor's Courses | | | | | | | | |
| | Govt. Supported | Self Supported | Govt. Supported | Self Supported | Govt. Supported | Self Supported | Govt. Supported | Self Supported | Govt. Supported | Self Supported | Total |
| Afghanistan | 4 | | 6 | | | | | | 10 | 0 | 10 |
| Australia | | | | | | | | 1 | 0 | 1 | 1 |
| Bangladesh | | | 3 | 1 | | | | | 3 | 1 | 4 |
| Brazil | | 1 | 1 | | 2 | | | | 3 | 1 | 4 |
| Cambodia | | 1 | | | | | | | 0 | 1 | 1 |
| China | 1 | 33 | 6 | 19 | | 35 | | 35 | 7 | 122 | 129 |
| China (Taiwan) | | | | | | | | 2 | 0 | 2 | 2 |
| Ethiopia | | | | 1 | | | | | 0 | 1 | 1 |
| Finland | | | | | | | | 1 | 0 | 1 | 1 |
| France | | | | 1 | | | | 3 | 0 | 4 | 4 |
| Germany | | | | 1 | | | | | 0 | 1 | 1 |
| India | 1 | 2 | | 4 | | | | | 1 | 6 | 7 |
| Indonesia | | | 1 | 3 | 1 | | 1 | | 3 | 3 | 6 |
| Republic of Korea | | 4 | | 1 | 13 | 18 | | | 13 | 23 | 36 |
| Malaysia | | | | 6 | | 18 | | 2 | 0 | 26 | 26 |
| Mongolia | 1 | | | | | 1 | | | 1 | 1 | 2 |
| Myanmar | | | 1 | | | | | | 1 | 0 | 1 |
| Nepal | | | | 1 | | | | | 0 | 1 | 1 |
| Pakistan | | | 1 | | | | | | 1 | 0 | 1 |
| Slovakia | | 1 | | | | | | | 0 | 1 | 1 |
| Spain | | | | | | | | 2 | 0 | 2 | 2 |
| Sri Lanka | | | | | 1 | | | | 1 | 0 | 1 |
| Thailand | | | | 1 | | | | | 0 | 1 | 1 |
| Tunisia | | | 1 | | | | | | 1 | 0 | 1 |
| Turkey | | | | 2 | | | | | 0 | 2 | 2 |
| Uganda | | | | | 1 | | | | 1 | 0 | 1 |
| Vietnam | 1 | 6 | | 2 | | 21 | | | 1 | 29 | 30 |
| Total | 8 | 48 | 20 | 43 | 18 | 93 | 1 | 46 | 47 | 230 | 277 |
| | 56 | | 63 | | 111 | | 47 | | 277 | | |

Note: Govt. Supported ; Japanese Government Scholarship Students
Self Supported ; Foreign Government Sponsored Students and Privately Financed Students

## PROGRAMS FOR INTERNATIONAL STUDENTS

### International Graduate Program for Manufacturing Engineering

NITech has developed and launched a Graduate School (Master's Course) program for international students through university-industry collaborative partnerships. The program develops super engineers who are familiar with the manufacturing industry and who also have an understanding about Japan combined with a global sense of awareness. Students, who acquire advanced knowledge in the field of manufacturing as well as Japanese language skills for business, are expected to play active roles in Japanese companies upon graduating from the program.

- Target level : Postgraduate (Master's degree)
- Year of Implementation: From FY 2007
- Main scholarships: NITech scholarships etc.

### Double Degree Program linked to Doctoral Program

This program enables students from partner universities in China to obtain the full degree from our Institute in addition to the degree from the home university under the supervision of a research advisor linked to both institutions. The student can then go on to obtain a doctorate degree from one of the two universities.

- Target level: Postgraduate (Master's or PhD degree)
- Year of implementation: From FY 2007
- Partner institutions: Tongji University (China), Beijing University of Chemical Technology (China)
- Main scholarships : NITech scholarships etc.

### Hanoi Twinning Program

This program is offered in partnership with the Vietnamese government. For the first part of their undergraduate studies, students spend two and a half years in Vietnam taking Japanese language classes and classes in their specialized fields in their native tongue. For the latter half of the program, students are educated in their specialized fields at the NITech.

- Objective: To train engineers to be future leaders in the manufacturing industry
- Target level: Undergraduate
- Year of implementation : From FY 2007
- Partner institution : Hanoi University of Science and Technology (Vietnam)
- Main scholarships : Exemption of tuition, etc.



## DEPARTMENTS

### Faculty of Engineering

| | Departments | Programs |
|---|---|---|
| Day Courses | Life and Materials Engineering | Molecular Chemistry Biological Chemistry Biomaterials |
| | Environmental and Materials Engineering | Ceramics Materials Function |
| | Mechanical Engineering | Fine Measurement Mechanical System Energy System |
| | Electrical and Electronic Engineering | Electronics Energy Design Communications |
| | Computer Science | Computer Network Artificial Intelligence Multimedia and HCI |
| | Architecture and Design | Architecture Design |
| | Civil Engineering and Systems Management | Civil and Environmental Engineering<br>Systems Management and Engineering |
| Evening Courses | Materials Engineering<br>Mechanical Engineering<br>Electrical and Computer Engineering<br>Civil and Environmental Engineering | |

### Graduate School of Engineering

| Departments | Fields |
|---|---|
| Materials Science and Engineering | Organic Materials Inorganic Materials Chemical Process<br>Materials Function and Design Life Function |
| Engineering Physics, Electronics and Mechanics | Electronics Fine Measurements Mechanics Energy |
| Computer Science and Engineering | Mathematics and Mathematical Science Computational Intelligence<br>Computing and Communications Systems and Control<br>Multimedia and Human Computer Interaction |
| Architecture, Civil Engineering and Industrial Management Engineering | Human Space Civil Engineering<br>Environmental Engineering and Disaster Prevention Management Engineering |
| Techno-Business Administration | Technology and Industry Management Core Technologies |
| Frontier Materials | Environmental Ceramic Materials Advanced Energy Materials<br>Molecular Life Science and Nanotechnology |
| Scientific and Engineering Simulation | Computational Applied Sciences Computer Science and System Engineering<br>Simulation in Civil Engineering and Architectural Systems |
| Nanopharmaceutical Sciences | Advanced Medicinal Chemistry |

## NUMBER OF STUDENTS

### Faculty of Engineering (Day Courses)

(as of May 1, 2014)

| Departments | Enrollment | | Current Enrollment | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1st Year | | | 2nd Year | | | 3rd Year | | | 4th Year | | | Total | | |
| | Annual | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Life and Materials Engineering | 154 | 620 | 114 (5) | 54 (0) | 168 (5) | 113 (0) | 48 (2) | 161 (2) | 117 (0) | 51 (0) | 168 (0) | 141 (1) | 46 (4) | 187 (5) | 485 (6) | 199 (6) | 684 (12) |
| Environmental and Materials Engineering | 94 | 380 | 92 (1) | 9 (1) | 101 (2) | 82 (1) | 15 (3) | 97 (4) | 87 (2) | 9 (0) | 96 (2) | 105 (2) | 7 (1) | 112 (3) | 366 (6) | 40 (5) | 406 (11) |
| Mechanical Engineering | 184 | 740 | 164 (6) | 24 (0) | 188 (6) | 174 (4) | 19 (0) | 193 (4) | 171 (9) | 24 (2) | 195 (11) | 244 (17) | 27 (1) | 271 (18) | 753 (36) | 94 (3) | 847 (39) |
| Electrical and Electronic Engineering | 139 | 560 | 139 (4) | 9 (2) | 148 (6) | 138 (3) | 4 (0) | 142 (3) | 150 (5) | 8 (0) | 158 (5) | 175 (5) | 1 (0) | 176 (5) | 602 (17) | 22 (2) | 624 (19) |
| Computer Science | 164 | 660 | 156 (1) | 8 (0) | 164 (1) | 153 (3) | 14 (0) | 167 (3) | 154 (2) | 19 (0) | 173 (2) | 209 (2) | 17 (1) | 226 (3) | 672 (8) | 58 (1) | 730 (9) |
| Architecture and Design | 80 | 320 | 57 (3) | 28 (1) | 85 (4) | 51 (0) | 32 (0) | 83 (0) | 52 (2) | 29 (0) | 81 (2) | 89 (1) | 21 (3) | 110 (4) | 249 (6) | 110 (4) | 359 (10) |
| Civil Engineering and Systems Management | 90 | 360 | 80 (1) | 11 (0) | 91 (1) | 79 (0) | 16 (0) | 95 (0) | 85 (0) | 10 (2) | 95 (2) | 105 (5) | 17 (3) | 122 (8) | 349 (6) | 54 (5) | 403 (11) |
| Engineering Interdisciplinary Program | 5 | | 1 (0) | 3 (0) | 4 (0) | 1 (0) | 1 (0) | 2 (0) | 3 (0) | 1 (0) | 4 (0) | 2 (0) | 1 (0) | 3 (0) | 7 (0) | 6 (0) | 13 (0) |
| Total | 910 [10] | 3,640 [20] | 803 (21) | 146 (4) | 949 (25) | 791 (11) | 149 (5) | 940 (16) | 819 (20) | 151 (4) | 970 (24) | 1,070 (33) | 137 (13) | 1,207 (46) | 3,483 (85) | 583 (26) | 4,066 (111) |

Note: ( ) indicates international students.
[ ] indicates students incorporated into 3rd Year.

### Faculty of Engineering (Evening Courses)

(as of May 1, 2014)

| Departments | Enrollment | | Current Enrollment | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1st Year | | | 2nd Year | | | 3rd Year | | | 4th Year | | | 5th Year | | | Total | | |
| | Annual | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Materials Engineering | 5 | 25 | 5 | 1 | 6 | 4 | 1 | 5 | 5 | 1 | 6 | 6 | | 6 | 4 | 1 | 5 | 24 | 4 | 28 |
| Mechanical Engineering | 5 | 25 | 5 | | 5 | 5 | 1 | 6 | 5 | 1 | 6 | 6 | | 6 | 10 | | 10 | 31 | 2 | 33 |
| Electrical and Computer Engineering | 5 | 25 | 5 | 1 | 6 | 5 | 1 | 6 | 5 | | 5 | 6 | | 6 | 14 | | 14 | 35 | 2 | 37 |
| Civil and Environmental Engineering | 5 | 25 | 4 | 1 | 5 | 5 | | 5 | 7 | | 7 | 4 | | 4 | 11 | 3 | 14 | 31 | 4 | 35 |
| Total | 20 | 100 | 19 | 3 | 22 | 19 | 3 | 22 | 22 | 2 | 24 | 22 | 0 | 22 | 39 | 4 | 43 | 121 | 12 | 133 |

## Graduate School of Engineering (Master's Courses)

(as of May 1, 2014)

| Departments | Enrollment | | Current Enrollment | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1st Year | | | 2nd Year | | | Total | | | |
| | Annual | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | |
| Materials Science and Engineering | 100 | 200 | 100 (1) | 13 (0) | 113 (1) | 105 (2) | 13 (0) | 118 (2) | 205 (3) | 26 (0) | 231 (3) | |
| Engineering Physics, Electronics and Mechanics | 100 | 200 | 112 (5) | 6 (1) | 118 (6) | 107 (4) | 6 (0) | 113 (4) | 219 (9) | 12 (1) | 231 (10) | |
| Computer Science and Engineering | 120 | 240 | 133 (1) | 7 (2) | 140 (3) | 144 (7) | 4 (2) | 148 (9) | 277 (8) | 11 (4) | 288 (12) | |
| Architecture, Civil Engineering and Industrial Management Engineering | 75 | 150 | 52 (2) | 20 (3) | 72 (5) | 74 (2) | 14 (3) | 88 (5) | 126 (4) | 34 (6) | 160 (10) | |
| Techno-Business Administration | 33[16] | 50[16] | 30 (2) | 6 (0) | 36 (0) | 22 (1) | 7 (0) | 29 (1) | 52 (3) | 13 (0) | 65 (3) | |
| Frontier Materials | 78 | 156 | 74 (1) | 5 (0) | 79 (1) | 70 (2) | 11 (2) | 81 (4) | 144 (3) | 16 (2) | 160 (5) | |
| Scientific and Engineering Simulation | 80 | 160 | 76 (5) | 7 (1) | 83 (6) | 81 (2) | 7 (5) | 88 (7) | 157 (7) | 14 (6) | 171 (13) | |
| Total | 586 [16] | 1,156 [16] | 577 (17) | 64 (7) | 641 (22) | 603 (20) | 62 (12) | 665 (32) | 1,180 (37) | 126 (19) | 1,306 (56) | |

Note: ( ) indicates international students.
[ ] indicates the short-term special course students.

## Graduate School of Engineering (Doctor's Courses)

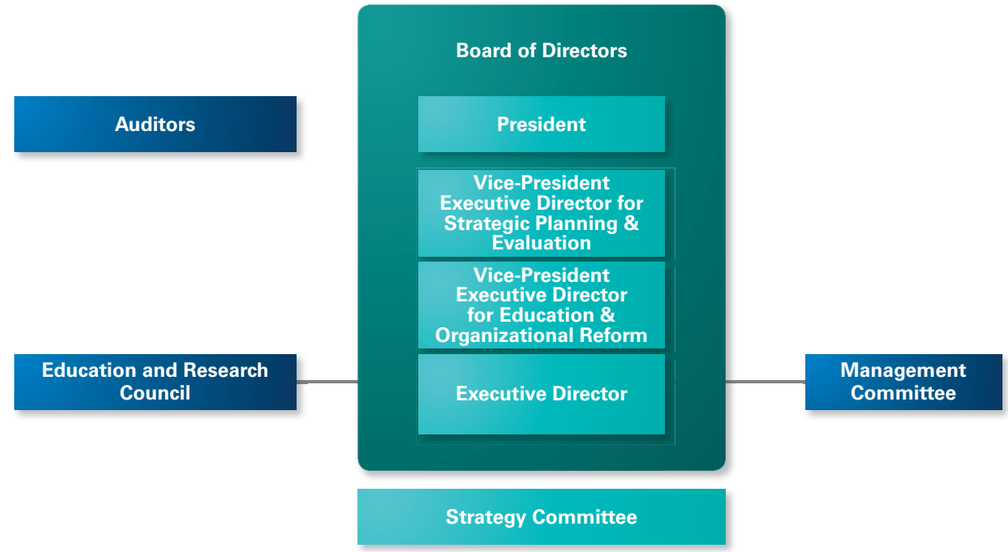
(as of May 1, 2014)

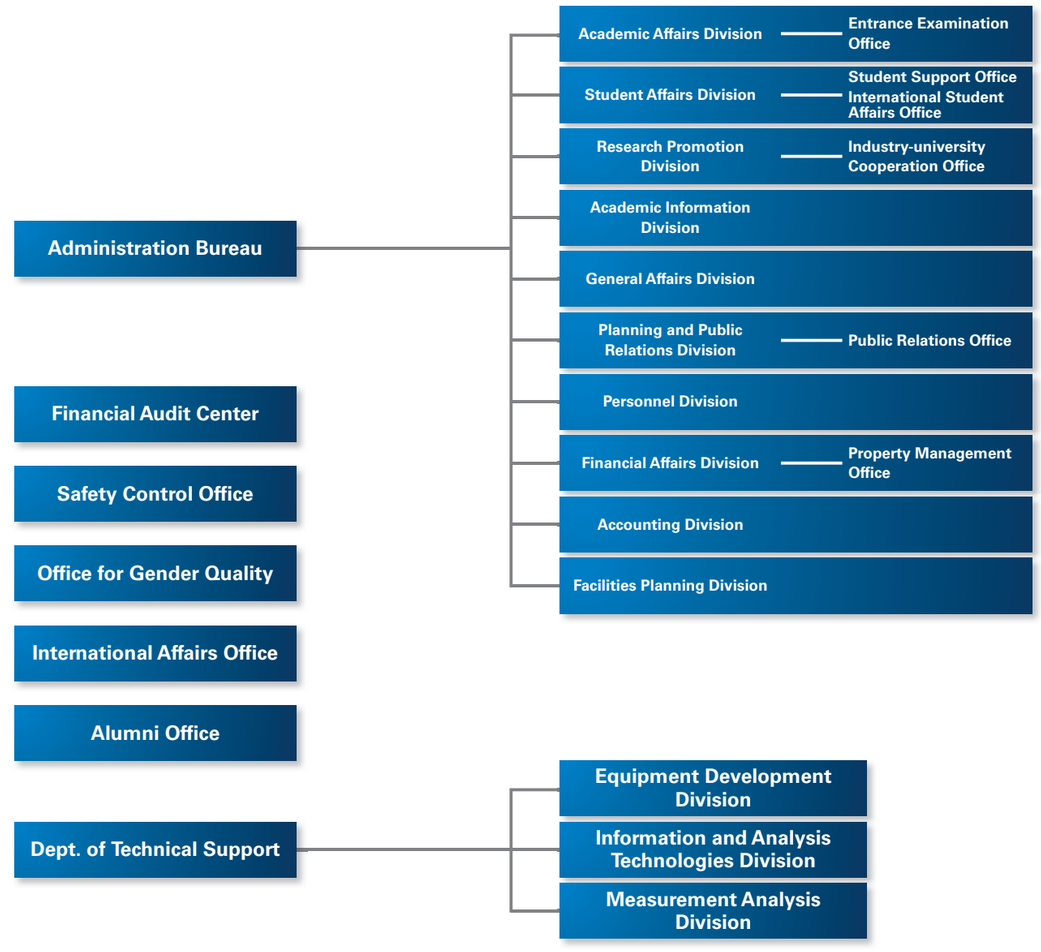
| Departments | Enrollment | | Current Enrollment | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1st Year | | | 2nd Yeaer | | | 3rd Year | | | Total | | |
| | Annual | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Materials Science and Engineering | 5 | 15 | 2 (1) | | 2 (1) | 3 (1) | | 3 (1) | 7 (1) | 1 (1) | 8 (2) | 12 (3) | 1 (1) | 13 (4) |
| Engineering Physics, Electronics and Mechanics | 5 | 15 | 5 (3) | | 5 (3) | 5 (0) | | 5 (0) | 10 (2) | 1 (0) | 11 (2) | 20 (5) | 1 (0) | 21 (5) |
| Computer Science and Engineering | 5 | 15 | 10 (2) | | 10 (2) | 8 (1) | 1 (1) | 9 (2) | 22 (6) | 1 (1) | 23 (7) | 40 (9) | 2 (2) | 42 (11) |
| Architecture, Civil Engineering and Industrial Management Engineering | 4 | 12 | 12 (0) | 1 (0) | 13 (0) | 6 (3) | 2 (1) | 8 (4) | 20 (4) | 6 (2) | 26 (6) | 38 (7) | 9 (3) | 47 (10) |
| Frontier Materials | 12 | 36 | 7 (4) | | 7 (4) | 11 (3) | 3 (3) | 14 (6) | 18 (8) | 3 (1) | 21 (9) | 36 (15) | 6 (4) | 42 (19) |
| Scientific and Engineering Simulation | 8 | 24 | 5 (2) | 2 (2) | 7 (4) | 9 (2) | 2 (2) | 11 (4) | 14 (3) | 1 (1) | 15 (4) | 28 (7) | 5 (5) | 33 (12) |
| Cooperative Major in Nanopharmaceutical Sciences | 3 | 6 | 5 (1) | | 5 (1) | 2 (1) | 1 (0) | 3 (1) | | | 0 (0) | 7 (2) | 1 (0) | 8 (2) |
| Total | 42 | 123 | 46 (13) | 3 (2) | 49 (15) | 44 (11) | 9 (7) | 53 (18) | 91 (24) | 13 (6) | 104 (30) | 181 (48) | 25 (15) | 206 (63) |

Note: ( ) indicates international students.
Newly established Cooperative Major in Nanopharmaceutical Sciences on Apr 1, 2013



## MANAGEMENT ORGANIZATION



## NUMBER OF STAFF MEMBERS

### Directors

(as of May 1, 2014)

| President | | | Executive | | | Auditor | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 1 | | 1 | 3 | | 3 | 2 | | 2 | 6 | 0 | 6 |

### Academic Staff (Full-time)

(as of May 1, 2014)

| Age | Professor | | | Associate Professor | | | Assistant Professor | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| ～24 | | | | | | | | | | 0 | 0 | 0 |
| 25～34 | | | | 1 | 1 | 2 | 17 | 3 | 20 | 18 | 4 | 22 |
| 35～44 | 1 | | 1 | 58 | 3 | 61 | 36 | 3 | 39 | 95 | 6 | 101 |
| 45～54 | 66 | 2 | 68 | 56 | 4 | 60 | 6 | | 6 | 128 | 6 | 134 |
| 55～64 | 63 | 6 | 69 | 13 | | 13 | 1 | | 1 | 77 | 6 | 83 |
| 65～ | | | | | | | | | | 0 | 0 | 0 |
| Total | 130 | 8 | 138 | 128 | 8 | 136 | 60 | 6 | 66 | 318 | 22 | 340 |

### Staff (Full-time)

(as of May 1, 2014)

| Administrative Staff | | | Technical Staff | | | Medical Staff | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 73 | 49 | 122 | 37 | 15 | 52 | | 1 | 1 | 110 | 65 | 175 |

※ Exclude fixed-term or re-employment contract holder

### Foreign Academic and Administrative Staff

(as of May 1, 2014)

| Countries | Professors | Associate Professors | Assistant Professors | Administrative Staff | Technical Staff | Medical Staff | Total |
|---|---|---|---|---|---|---|---|
| Bangladesh | | 1 | | | | | 1 |
| Brazil | | | 1 | | | | 1 |
| China | 2 | | 1 | | | | 3 |
| Ireland | | 1 | | | | | 1 |
| Nepal | | 1 | | | | | 1 |
| Republic of Korea | 1 | 1 | | | | | 2 |
| Thailand | | | 1 | | | | 1 |
| United States | | 2 | | | | | 2 |
| Total | 3 | 6 | 3 | 0 | 0 | 0 | 12 |



## NITech FACILITIES

(as of May 1, 2014)

| | Facilities | Building | Area | Address |
|---|---|---|---|---|
| | | m² | m² | |
| Gokiso Campus | Engineering Department and General Education School Buildings | 103,191 | 138,664 | Gokiso-cho, Showa-ku, Nagoya 466-8555 |
| | Administration Office | 3,299 | | |
| | Library | 5,577 | | |
| | EDUCATIONAL RESEARCH CENTER | 1,723 | | |
| | Quality Innovation Techno-Center | (1,028) | | |
| | Research Center for Nano-Device and System | (508) | | |
| | Research and Education Center for Next Generation Automobile Engineering | (97) | | |
| | Center for Research on Assistive Technology for Building a New Community | (66) | | |
| | Advanced Disaster Prevention Engineering Center | (24) | | |
| | Center for Social Contribution and Collaboration | 1,371 | | |
| | NIT International Center | 313 | | |
| | Information Technology Center | 1,479 | | |
| | Instrument and Research Technology Center | 1,657 | | |
| | Innovation Center for Multi-Business of Nitride Semiconductors | 2,350 | | |
| | Health Support Center | 509 | | |
| | Auditorium | 1,551 | | |
| | Gymnasiums | 2,479 | | |
| | Facilities for Extracurricular Activities | 1,729 | | |
| | The University Hall | 4,478 | | |
| | NITech International House | 2,155 | | |
| | NIT Club (Guest House) | 264 | | |
| | *Kouyukaikan* | 589 | | |
| | NITech Mart | 303 | | |
| | Others | 2,704 | | |
| | Total | 131,178 | 138,664 | |
| Chikusa Campus | Chikusa Athletic Field | 412 | 34,439 | 2-512-1, Kitachikusa, Chikusa-ku, Nagoya 464-0083 |
| | Student Dormitories (Kowa-ryo) | 2,933 | 7,336 | |
| | Total | 3,345 | 41,775 | |
| | Advanced Ceramics Research Center | 2,754 | 20,943 | 10-6-29, Asahigaoka, Tajimi 507-0071 |
| | TAJIMI *EKIMAE* area | [1,195] | | 3-101-1 Hon-machi, Tajimi, 507-0033 |
| | Advanced Ceramics Research Center | (771) | | |
| | Open Laboratory and others | (424) | | |
| | Gamagori Yacht-House | 170 | [200] | 1-4-1, Kaiyou-cho, Gamagori, 443-0014 |
| | Shonaikawa Boat-House | 376 | 635 | 358-3, Nishinagare, Daitoro-cho, Nakagawa-ku, Nagoya 454-0944 |
| | Shidami Extracurricular-Activity Facilities | 246 | [87] 7,683 | 2678, Minamihara, Nakashidami, Moriyama-ku, Nagoya 463-0002 |
| | Kisokomakogen Seminar House | 378 | [4,628] | 129-10, Mizusawa, Shinkai, Kisomachi, Kiso-gun, Nagano 397-0002 |
| | Previous Hazama House | 2,669 | 2,981 | 27, Hazama-cho, Showa-ku, Nagoya 466-0062 |
| | Total | [1,195] 142,311 | [4,915] 212,681 | |

[ ]: on lease
( ): itemized

## ACADEMIC CALENDAR

**ACADEMIC YEAR 2014**
**(April 1, 2014 ~ March 31, 2015)**

| | |
|---|---|
| **1st Semester** | April 1 ~ September 30 |
| **Entrance Ceremony** | April 6 |
| **2nd Semester** | October 1 ~ March 31 |
| **Commencement** | March 23 |

**HOLIDAYS AND VACATIONS**

| | |
|---|---|
| **Saturdays and Sundays** | |
| **National Holidays** | 15 days |
| **The foundation day** | November 1 |
| **Summer Vacation** | August 6 ~ September 30 |
| **Winter Vacation** | December 24 ~ January 6 |

## HISTORY

Nagoya Higher Technical School (founded in Mar.1905)
Aichi Prefectural College of Technology (founded in Feb.1943)

Nagoya College of Technology (renamed in Apr.1944)
Aichi Prefectural College of Technology (renamed in Jun.1944)

(under new educational system)
Nagoya Institute of Technology (founded in May.1949)

National University Corporation
Nagoya Institute of Technology (founded in Apr.1.2004)

## FINANCIAL SUMMARY FOR FY 2013

### Revenues

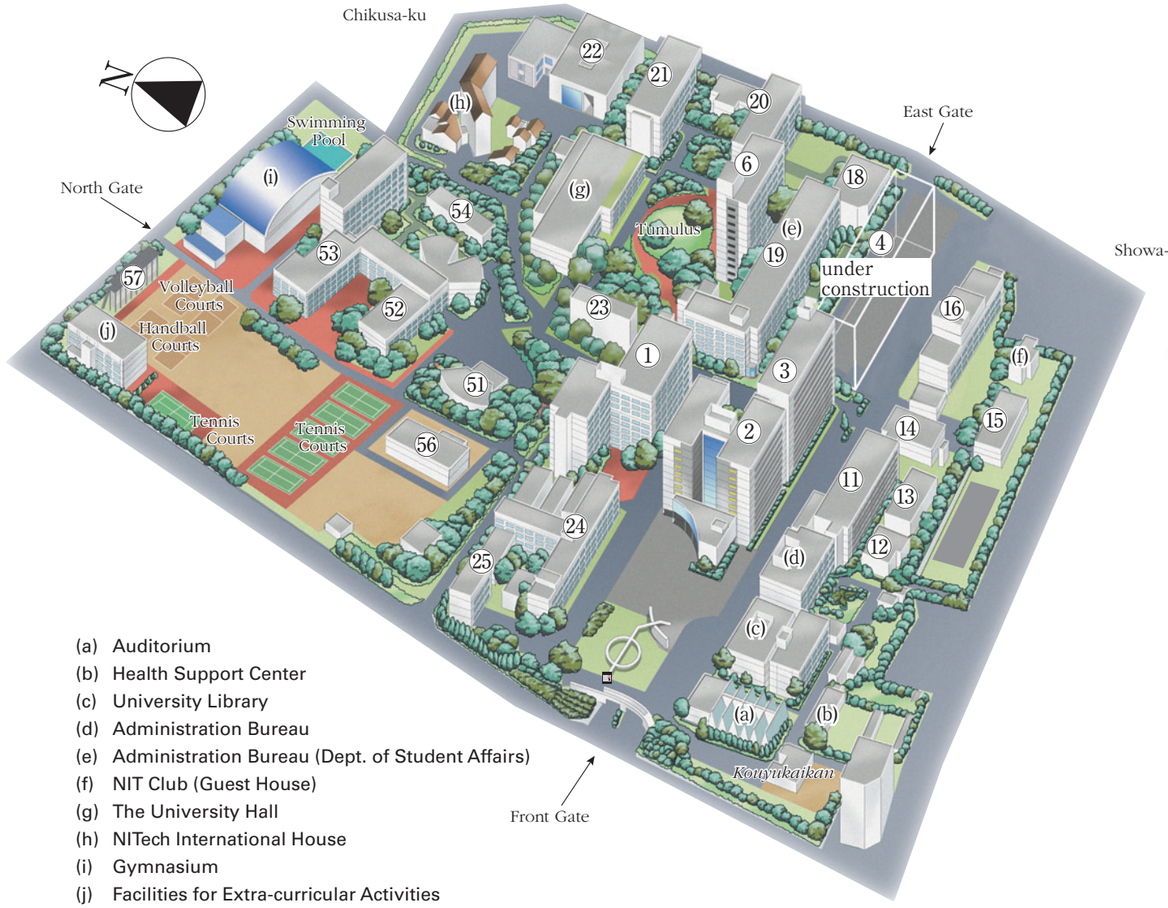
unit: million yen

| Item | Amount (JPY) |
|---|---|
| **Grants from the government** | 4,642 |
| **Tuition fees and others** | 3,461 |
| **Costs for Grants and Cooperative Research, etc.** | 3,873 |
| **Grants for facilities maintenance and others** | 1,385 |
| **Carry-over from the previous year** | 612 |
| **Total** | 13,973 |

### Expenditures

| Item | Amount (JPY) |
|---|---|
| **Personnel** | 5,251 |
| **Education, Research and operating cost** | 2,405 |
| **Costs for Grants and Cooperative Research, etc.** | 4,277 |
| **Facilities maintenance** | 1,385 |
| **Carry-over to the next year** | 655 |
| **Total** | 13,973 |

## CAMPUS MAP




(a) Auditorium
(b) Health Support Center
(c) University Library
(d) Administration Bureau
(e) Administration Bureau (Dept. of Student Affairs)
(f) NIT Club (Guest House)
(g) The University Hall
(h) NITech International House
(i) Gymnasium
(j) Facilities for Extra-curricular Activities

※ The number from ① to ㊼ shows the number of building.

### The University Hall

The University Hall includes a banquet room, cafeteria, barbershop, travel counter, and coopshop (selling books, stationery, electronics, appliances, general merchandise, etc.). There are also meeting rooms for the use of students.

### NITech Mart

NITech Mart includes a convenience store「Hajiko」at the first floor, and Lounge Café at the second floor. ATM machine is installed in「Hajiko」. Lounge Café can be used for dining area and also communication space.

### Outside the campus

Kisokomakogen Seminar House in Nagano Prefecture is for extracurricular activities, research and training and social events for students and employees of NITech.

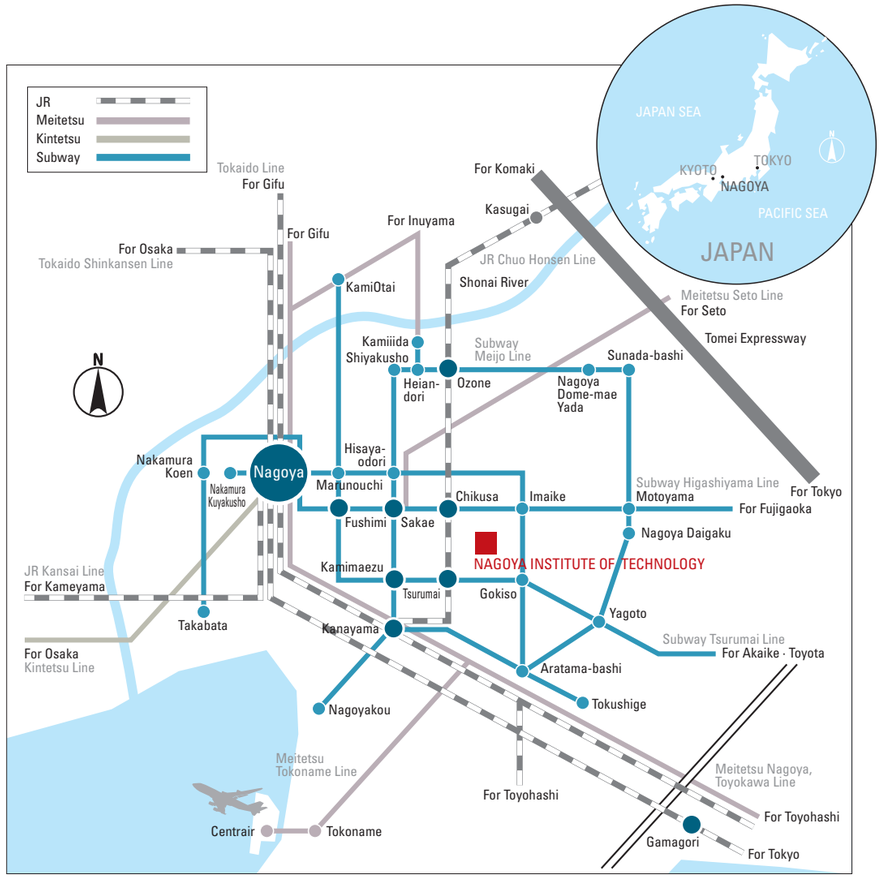
## STUDENTS LIFE AT NITech


Nagoya Castle was built by the order of Tokugawa leyasu in 1612 for Owari Tokugawa Family, and it symbolizes Nagoya's pride and power. There are exhibits describing the lifestyle of the local lords in the castle tower (main donjon). Visitors can see the reconstruction project being performed on the Hommaru Palace. Hommaru Palace (the residence of the castle lord), which burned down during the war, was second only to Kyoto's Nijo Castle in splendor.

Nagoya Travel Guide, NAGOYA Info.



## LOCATION




Walking distance to the city center

### Means of Transportation

| | | | | | | |
|---|---|---|---|---|---|---|
| JR | Nagoya | (Chuo Honsen Line) | Tsurumai | | | |
| Subway | Nagoya | (Higashiyama Line) | Fushimi | (Tsurumai Line) | Tsurumai | |
| Air route | Centrair | (Meitetsu Tokoname Line) | Kanayama | (JR Chuo Honsen Line) | Tsurumai | |

**"Nagoya"**

- Located at the center of Japan
- 3rd largest city after Tokyo and Osaka
- Center of manufacturing industries (automobiles, aerospace, household electric appliances, machine tools)

National University Corporation

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