# NAIST®

Nara Institute of Science and Technology

GUIDEBOOK 2021

# About NAIST

Nara Institute of Science and Technology (NAIST) was founded as a unique Japanese national university consisting solely of graduate schools in the three areas of information science, biological sciences, and materials science to redefine graduate-level education. In 2018, to push forward the boundaries of advanced science and technology, the three graduate schools merged to create the Graduate School of Science and Technology with Education Programs in the original three research areas and four in their interdisciplinary areas. At present, over 1,000 students—roughly 25% from overseas—are supervised by approximotely 200 NAIST faculty.

With its cutting-edge facilities and a high student-to-faculty ratio, NAIST's world-leading research and education are a direct result of its rich, global environment and supportive infrastructure. Moreover, NAIST's faculty and students' outstanding achievements are shared world-wide through patents, licenses, spin-off companies, and active international exchange. As a result, NAIST has quickly established itself as a world-class research and education center where young research scientists and engineers become tomorrow's global leaders.

From its establishment, NAIST has developed education programs and research that begin with NAIST and spread across research fields through our extensive global network of NAIST graduates and international partner institutions. This network is key to not only our research activities, which are undertaken spanning the globe to promote collaboration at the forefronts of science and technology, but a central part of NAIST's global education programming, allowing students to experience today's international trends and environments.

NAIST eagerly promotes admission of students from both Japan and overseas who have strong basic academic capabilities, regardless of their academic backgrounds, and actively admits researchers, engineers and others currently working in society with strong enthusiasm for advanced scientific research and clearly defined aspirations for the future.

**30th ANNIVERSARY**
無限の可能性、ここが最先端
-Outgrow your limits-

With NAIST approaching its 30th anniversary on October 1, 2021, we are thankful for the support we have received in these first 30 years and celebrate our achievements as a unique graduate school institution while looking forward to growing along with our partner institutions to further lead education and research in science and technology.

# NAIST Numbers

NAIST is an institute focused solely on graduate school education based on its research achievements in the leading fields of science and technology.

## NAIST Student Enrollment

| Master's | Doctoral | Research students, etc. |
|---|---|---|
| 703 | 346 | 62 |

Total: 1111 (International students: 25%)

(as of May 2020)

## NAIST Faculty and Staff

| Executive administration | Faculty | Staff |
|---|---|---|
| 8 | 196 | 163 |

Total: 367 (International faculty and staff: 14%)

(as of May 2020)

## High Percentage of External Revenue

FY2019 Revenue: Total 9.9 billion (JPY)

- Tuition 5%
- Infrastructure, Other 4%
- External Revenue 28%
- Administrative Subsidy 63%
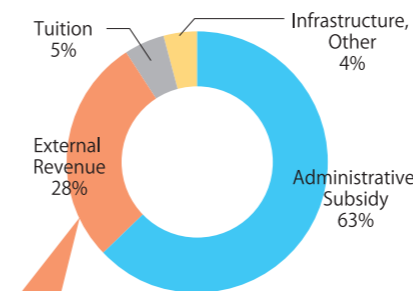
## High Allocation of Educational Research Funding

FY2019 Expenses: Total 9.1 billion (JPY)

- Facilities, Etc. 17%
- Educational Research Funding 37%
- Personnel 46%
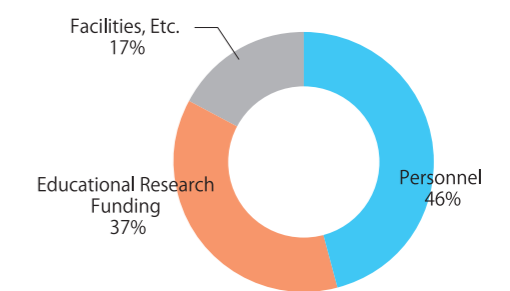
### External Revenue Breakdown

- Joint research with industry, etc.
- Endowments
- Grants-in-aid for Scientific Research, etc.
- Consignment research
- Other competitive research funding
- Number of cases

| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|---|---|---|---|---|
| Amount of revenue (Unit: billion JPY) | 2.53 | 2.75 | 2.8 | 2.89 | 2.85 |
| Number of cases | 540 | 603 | 607 | 635 | 649 |

# NAIST Timeline

| Year | Event |
|---|---|
| 1991 | Nara Institute of Science and Technology established on October 1st (Graduate School of Information Science) |
| 1992 | Graduate School of Biological Sciences and Information Technology Center established |
| 1993 | Research and Education Center for Genetic Information established |
| 1994 | Research Center for Advanced Science and Technology established |
| 1996 | Graduate School of Materials Science established |
| 1998 | Research and Education Center for Materials Science established |
| 2002 | Department of Bioinformatics and Genomics established (Graduate School of Information Science) |
| 2003 | Intellectual Property Division established |
| 2004 | NAIST became Nara Institute of Science and Technology National University Corporation Industry-Government-Academia Collaboration Group established |
| 2009 | Gender Equality Promotion Office and Center for International Relations established |
| 2010 | Information Technology Center succeeded by the Information Initiative Center Research Center for Advanced Science and Technology established |
| 2013 | Career Services Office and Institute of Research Initiatives established |
| 2015 | Center for Strategy and Planning established Institute for Educational Initiatives established and Institute of Research Initiatives restructured |
| 2017 | Data Science Center established |
| 2018 | The Graduate School of Science and Technology established (Graduate Schools of Information, Biological and Materials Sciences merged together) |
| 2021 | Center for Digital Green-innovation established |

# NAIST's Educational Structure
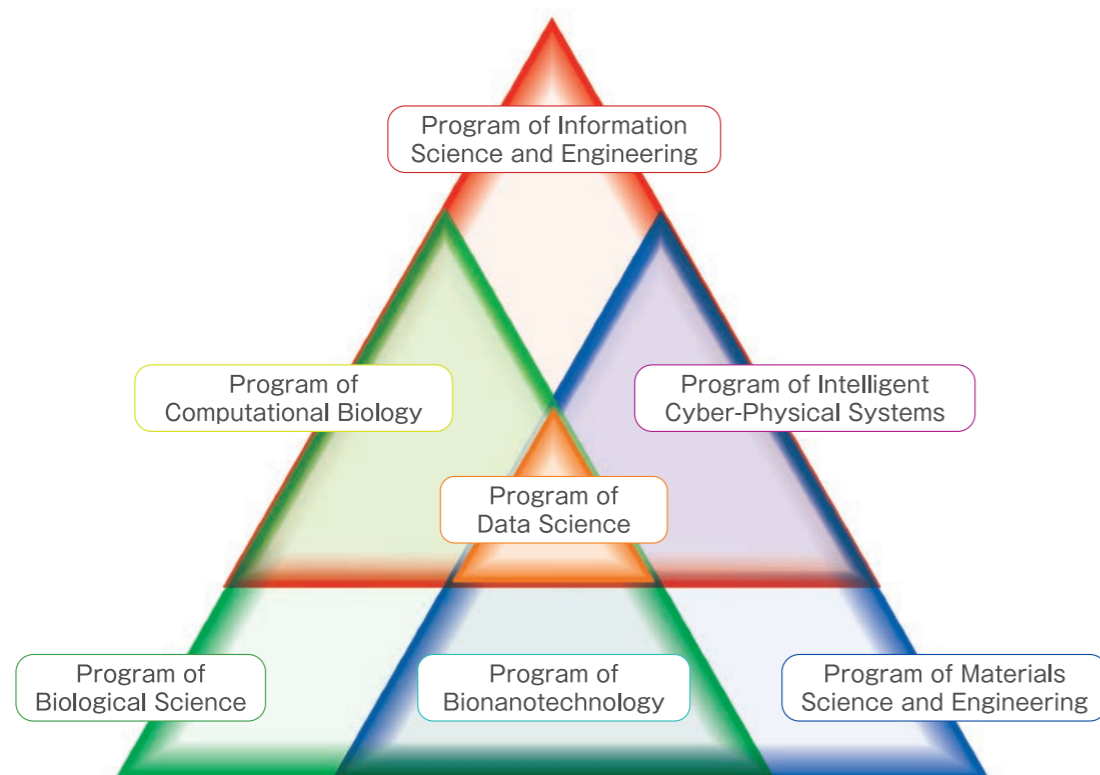
## ▌Graduate School of Science and Technology

The Graduate School of Science and Technology was established to remove existing barriers between academic fields to form a flexible educational structure where faculty from related areas come together to perform education at the forefronts science and technology and to introduce an educational system for basic and specialized knowledge to prepare students for studies in diverse areas, and to allow them to reach beyond their specializations utilizing the knowledge and skills they attained in their undergraduate education. Additionally, in order to meet the ever-changing needs of society and to achieve real-world application, project-based learning and other practical educational projects led by invited researchers and engineers from private industry, etc. are incorporated into the curriculum. The specific objectives for the graduate education programs are:

The master's course fosters graduates with specialized knowledge and training, a wide understanding of related interdisciplinary fields, and the ability to approach issues and phenomena holistically to lead the application and innovation of science and technology throughout society.

The doctoral course fosters international awareness, self-reliance, and independence and develops researchers and skilled engineers with high ambitions that will advance the boundaries of science and technology taking leading roles throughout global industry, academia and government.

## ▌Multidisciplinary-focused Education Programs

The seven Education Programs of the Graduate School of Science and Technology span the three original fields of research at NAIST (information, biological and materials sciences) and include the developing interdisciplinary fields that emerge independent of traditional academic divisions to pursue current trends in science and technology. All laboratories belong to one or more Education Program and students choose the type of degree the will pursue depending on their studies and the focus of their research.



**Graduate School of Science and Technology**

# Education Programs

### Program of Information Science and Engineering
Degrees granted: Master's / Doctorate (engineering, science)

A focused information science program which fosters students able to support today's dynamic advanced information society, implementing further achievements in information science in diverse fields and their wide-spread application. This program enriches students' broad interdisciplinary vision and cultivates cutting-edge specialized knowledge and skills covering computer hardware, software and information net work technology; computer/human interaction and media technology; and various systems to fully utilize robotics and computer technology.

### Program of Computational Biology
Degrees granted: Master's / Doctorate (engineering, science, bioscience)

An interdisciplinary information science and bioscience program which fosters students who are able to collect and analyze the huge amounts of data related to the phenomena of life, such as medical imaging data and the enormous amounts of bio-information concerning genes, proteins, and metabolism, while fostering persons who will undertake the development of these technologies.

### Program of Biological Science
Degrees granted: Master's / Doctorate (bioscience)

A focused biological science program which fosters students able to facilitate societal development and environmental protection through activities concerning areas such as the environment, energy, food supply, resources, life quality and health maintenance, within industry and public institutions foreign/domestic. This program enhances students' knowledge and cultivate expertise in areas from the basic principles of the phenomena of life to the biodiversity found at the molecular, cellular and individual level of plants, animals and microorganisms.

### Program of Bionanotechnology
Degrees granted: Master's / Doctorate (engineering, science, bioscience)

An interdisciplinary bioscience and materials science program which fosters students who pursue new trends in bioscience based on materials science understanding, and cultivates abilities necessary for the creation of novel functional materials to contribute to the future of society, including development of pharmaceuticals and medical engineering materials, development of new polymers which imitate biological functions, development of novel compounds to increase farming productivity, and exploration of new cellular engineering to support regenerative medicine through an understanding of the molecular foundation of biogenic activity.

### Program of Materials Science and Engineering
Degrees granted: Master's / Doctorate (engineering, science)

A focused materials science program which fosters students with the foundational knowledge of materials science and advanced knowledge to fully utilize their expertise through a program spanning solid state physics, device engineering, molecular chemistry, polymeric materials and bionano-engineering, and undertake next generation science and technology to maintain affluent living & support societal development.

### Program of Intelligent Cyber-Physical Systems
Degrees granted: Master's / Doctorate (engineering, science)

An interdisciplinary materials and information science program which fosters students able to holistically graspareas including functional material design, devices with new functions and real-world sensing, analytical device design, system structuring to fully utilize analyzation results, and machine and robot control systems, who have specific, specialized knowledge and experience to support the social systems of this IoT era.

### Program of Data Science
Degrees granted: Master's / Doctorate (engineering, science, bioscience)

An interdisciplinary information, biological and materials science program which fosters human resources with a wide range of expertise in data-driven and AI-driven sciences related to information, biological, and materials science who will find hidden 'value' & 'truth' through data processing, visualization, & analysis of huge amounts of collected data to contribute to next generation of science and technology, and societal development.

# Globalization at NAIST

The coordinated education and research activities necessary to produce researchers and engineers who push forward the boundaries of science and technology and are active participants in today's global society, and the extensive organized support to ensure their success.

## Top Global University Project

In October 2014, NAIST was selected for the Top Global University Project funded by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). For a period of ten years, MEXT supports NAIST and other outstanding universities in their efforts to reform institutional governance and collaborate with top universities worldwide in order to strengthen international competitiveness. Through the Top Global University Project, NAIST has committed to enhancing its international graduate courses by creating a double degree scheme, developing a new model for graduate education based on world-class research, reforming institutional governance and strategic agility, creating a campus environment that supports trans-disciplinary education and cultural diversity, and merging its three graduate schools into a single entity to establish new, flexible research fields.
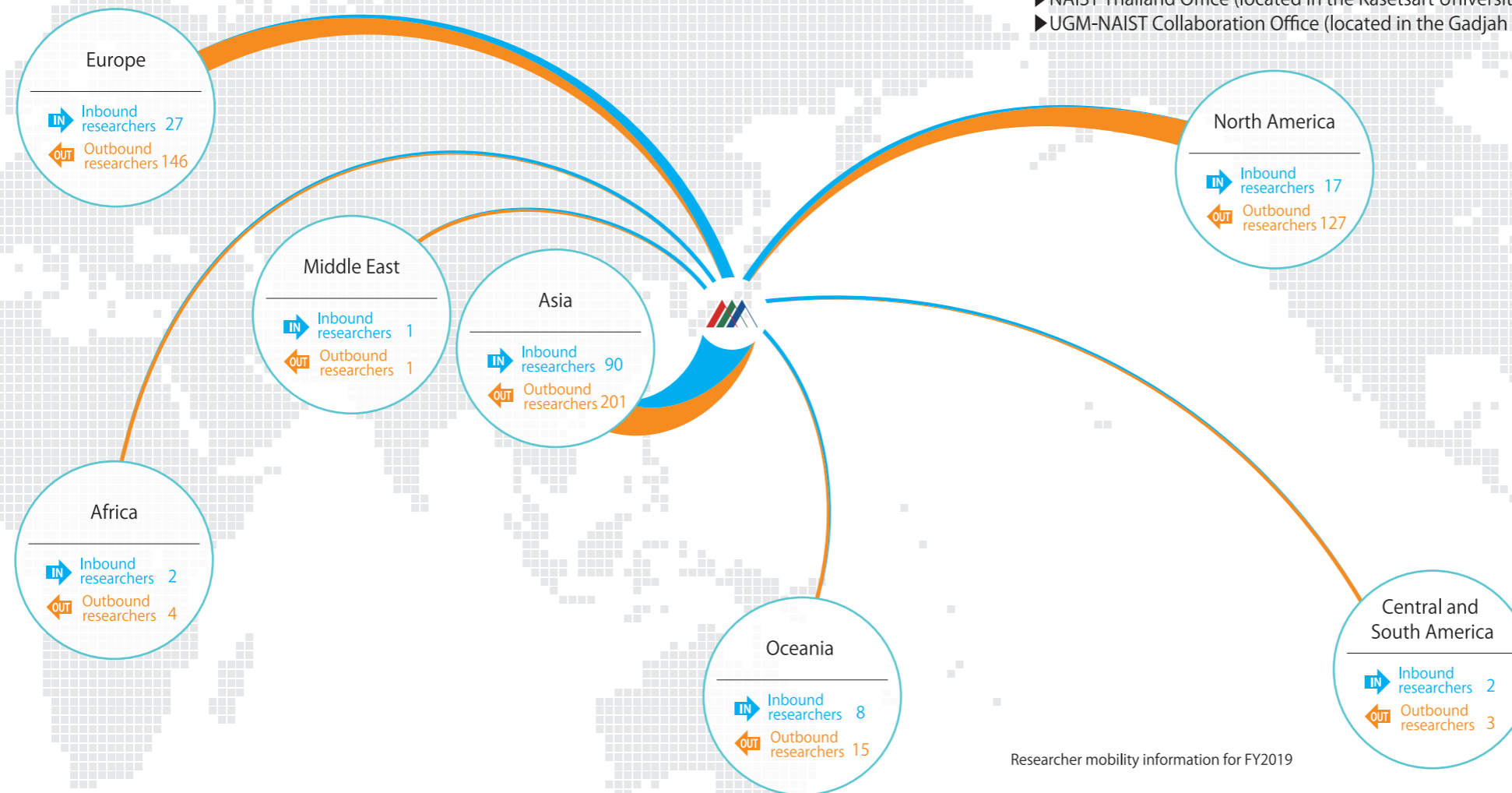
## International collaborative research network

### Overseas research laboratories

NAIST maintains two overseas research laboratories at partner institutions where our faculty reside to facilitate collaborative research and strengthen institutional ties.
▶Paul Sabatier University (France)    ▶University of California Davis (USA)

### On-campus international collaborative laboratories

There are two collaborative laboratories on campus where visiting faculty from international partner institutions lead research with young international researchers.
▶École Polytechnique (France)    ▶University of British Columbia (Canada)

## Overseas education and research collaboration offices

In Asia, NAIST has established two overseas offices in Thailand and Indonesia as hubs for education and research collaboration to support its growing network of graduates and partner institutions, and maintains an office to promote collaboration projects in Indonesia as well.
▶NAIST Indonesia Office (located in the Bogor Agricultural University Alumni Building)
▶NAIST Thailand Office (located in the Kasetsart University Faculty of Engineering)
▶UGM-NAIST Collaboration Office (located in the Gadjah Mada University Biotechnology Research Center)



**Europe**
IN Inbound researchers 27
OUT Outbound researchers 146

**North America**
IN Inbound researchers 17
OUT Outbound researchers 127

**Middle East**
IN Inbound researchers 1
OUT Outbound researchers 1

**Asia**
IN Inbound researchers 90
OUT Outbound researchers 201

**Africa**
IN Inbound researchers 2
OUT Outbound researchers 4

**Oceania**
IN Inbound researchers 8
OUT Outbound researchers 15

**Central and South America**
IN Inbound researchers 2
OUT Outbound researchers 3

Researcher mobility information for FY2019

### International Student Enrollment
(275 students from 34 countries/regions)

| | | | |
|---|---|---|---|
| China | 86 | Mongolia | 1 |
| Malaysia | 38 | Pakistan | 1 |
| Thailand | 33 | Afghanistan | 1 |
| Indonesia | 26 | Turkey | 1 |
| Philippines | 22 | Mexico | 1 |
| Vietnam | 17 | Guatemala | 1 |
| Korea | 6 | Columbia | 1 |
| Germany | 5 | Venezuela | 1 |
| Taiwan | 4 | Ecuador | 1 |
| Bangladesh | 4 | Brazil | 1 |
| France | 4 | The Gambia | 1 |
| Russia | 3 | Côte d'Ivoire | 1 |
| Nepal | 2 | Burkina-Faso | 1 |
| UK | 2 | Uganda | 1 |
| Senegal | 2 | Tanzania | 1 |
| Ethiopia | 2 | Mozambique | 1 |
| Kenya | 2 | Mauritius | 1 |

(as of October 2020)

## NAIST's global campus

At NAIST, in order to develop global leaders in science and technology, we have focused on the globalization of our campus, including academic environments and campus facilities, while also restructuring our education programming to respond to current global needs and trends in science and technology. These efforts have produced a truly unique on-campus community that is central to students' and researchers' experience at NAIST. With students from various cultures, fields and backgrounds studying and performing research under NAIST's diverse faculty, our campus has become an international hub for both education and research in science and technology and we are maintaining and actively expanding our network of domestic and international partners to further promote our activities globally.

### Division for Global Education

The Division for Global Education plans and implements programs including agreements and activities with overseas institutions, double degree programs, studying abroad, overseas faculty and staff development programs, collaborative research laboratories, and overseas offices.

# Agreements on Academic Exchange with 115 Overseas Institutions in 31 Countries/Regions

(as of October 2020)

NAIST's international network is centered upon our international partner institutions and the faculty and staff that continue to strengthen ties in both research and education. The academic agreements below are achieved through extensive collaboration and their contents cover areas including research collaboration, symposia, guest lectures, faculty and student exchange, and the sharing of scientific information and materials.

## Institution Level Agreements

**Asia**

**Korea**
Gwangju Institute of Science and Technology
Hanbat National University
Pohang University of Science and Technology

**China**
Institute of Genetics and Developmental Biology, Chinese Academy of Sciences
Tianjin University of Technology
Liaoning University
Soochow University
Northeast Normal University

**Taiwan**
National Yang Ming Chiao Tung University
The National Taiwan University of Science and Technology
National Cheng Kung University

**Vietnam**
Hanoi University of Science, Vietnam National University
University of Engineering and Technology, Vietnam National University
Vietnam National University HCMC, University of Information Technology
Hue University of Sciences
University of Science and Technology of Hanoi
Posts and Telecommunications Institute of Technology HCMC Campus

**Thailand**
Mahidol University
Chulalongkorn University
Kasetsart University
Chiang Mai University
King Mongkut's University of Technology Thonburi

**Malaysia**
University of Science, Malaysia
University of Malaya
University of Technology, Malaysia
Universiti Tunku Abdul Rahman
Universiti Kebangsaan Malaysia

**Philippines**
Ateneo de Manila University
University of the Philippines Diliman

**Indonesia**
Gadjah Mada University
Bogor Agricultural University
University of Indonesia
Hasanuddin University
Bandung Institute of Technology
Jenderal Soedirman University

**India**
KIIT College of Engineering
Indian Institute of Technology, Bombay
Indian Institute of Technology, Jodhpur

**Bangladesh**
Bangladesh University of Engineering and Technology

**Europe**

**UK**
University of Edinburgh
Department of Statistical Science, University College London

**Belgium**
University of Louvain

**France**
Paul Sabatier University
Ecole Polytechnique
Ecole Normale Superieure Paris-Saclay
Science and Technology, University of Lille 1
University Paris-Est Marne-la-Vallee
Telecom ParisTech
Sorbonne University
University of Paris-Saclay
Universite de Rennes 1
ESIGELEC
Ecole Normale Superieure de Lyon
The University of Picardie Jules Verne
University Bourgogne Franche-Comté

**Germany**
RWTH Aachen University
Justus Liebig University Giessen
Karlsruhe Institute of Technology
University of Regensburg
Coburg University of Applied Sciences and Arts

**Italy**
University of Cagliari
University of Trento

**Spain**
University of Granada

**Russia**
The St. Petersburg State Polytechnical University

**North Macedonia**
University of Information Science and Technology "St. Paul the Apostle"

**North America**

**Canada**
Queen's University at Kingston

**USA**
University of California Davis
University of Hawaii at Mānoa
University of California, San Diego
Mississippi State University

**South America**

**Brazil**
Universidade Federal de São Paulo

**Africa**

**Senegal**
Cheikh Anta Diop University

**Kenya**
University of Nairobi

**Oceania**

**Australia**
University of Technology Sydney
Macquarie University
The University of Newcastle
University of Adelaide

**New Zealand**
Unitec Institute of Technology

## School/Department Level Agreements

### ■ Information Science

**Asia**

**Korea**
Graduate School of Culture Technology, Department of Industrial Design, Korea Advanced Institute of Science and Technology
Graduate School of Electronics Engineering, Kyungpook National University

**China**
Department of Computer Science, City University of Hong Kong
School of Information Science and Engineering, Yunnan University

**Vietnam**
Institute of Information Technology, Vietnam Academy of Science and Technology
Faculty of Electronics and Telecommunications, HCMC University Of Science, Vietnam National University
Department of Electronic and Telecommunication Engineering, University of Science and Technology - The University of Danang, Vietnam

**Europe**

**France**
Telecom SudParis
École Supérieure d'Ingénieurs en Électrotechnique et Électronique Paris
École nationale supérieure d'ingénieurs de Caen

**Germany**
Faculty of Engineering and Computer Science, Ulm University
Department of Informatics, Technical University of Munich
Department of Electrical and Computer Engineering, Technical University of Munich
Faculty of Mathematics and Natural Sciences, Heinrich Heine University Düsseldorf

**Finland**
Department of Information Processing Science, Faculty of Science, University of Oulu
Faculty of Medicine, University of Turku

**South America**

**Brazil**
Departments of the University of San Paulo

### ■ Biological Science

**Asia**

**China**
College of Life Sciences, Nanjing Agricultural University
School of Life Sciences, Nanjing University

**Vietnam**
Institute of Biotechnology, Vietnam Academy of Science and Technology

**Singapore**
Temasek Life Sciences Laboratory Limited

**Bangladesh**
School of Health and Life Sciences, North South University

**North America**

**Canada**
Faculty of Science, University of British Columbia

**USA**
Biotechnology Institute, University of Minnesota

### ■ Materials Science

**Asia**

**China**
School of Chemistry and Chemical Engineering, Nanjing University

**Taiwan**
Institute of Biophotonics, National Yang Ming Chiao Tung University

**Vietnam**
Institute of Materials Science, Vietnam Academy of Science and Technology

**Singapore**
School of Materials Science and Engineering, Nanyang Technological University

**India**
Indian Institute of Science Education and Research, Thiruvananthapuram

**Europe**

**Netherlands**
Faculty of Science, Leiden University
Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology

**Germany**
Faculty of Engineering, RheinMain University of Applied Sciences

**Switzerland**
Faculty of Science, University of Zurich

**Austria**
Institute of Solid State Physics, Graz University of Technology

**Hungary**
Doctoral School of Physics, University of Debrecen

**North America**

**USA**
Macromolecular Science & Engineering Program, University of Michigan

# Double Degree Programs

With the rapid progression of globalization in various areas of industry and society, research leaders to guide international collaborative research bringing together human resources and emerging technologies to tackle the issues that face humankind regardless of borders are being called for. The double degree program was implemented for the systematic development of these human resources, focusing on enhancing international collaborative skills and the ability to cooperate on a global scale.

In the double degree programs, a limited number of students are enrolled at NAIST and a partner institution, and receive research guidance from both institutions' faculties to receive degrees from both institutions simultaneously. Currently, NAIST has agreements with 7 institutions for doctoral course double degree programs.

| Partner institution (Country/region) | Faculty, colleges, and areas | Rsearch areas at NAIST |
|---|---|---|
| National Yang Ming Chiao Tung University (Taiwan) | ① College of Science<br>② College of Electrical and Computer Engineering<br>③ College of Engineering | All divisions |
| Chulalongkorn University (Thailand) | Biochemistry and molecular biology, Faculty of Science | Biological science |
| Université Paul Sabatier (France) | Physics, chemistry and materials science | Materials science |
| Université Paris-Saclay (France) | ① Biology, biochemistry and biotechnology<br>② Communication systems<br>③ Computer science and informatics<br>④ Earth sustainability/environment<br>⑤ Economics, etc. | All divisions |
| Sorbonne Université (France) | Information science | Information science |
| Ulm University (Germany) | Computer science and engineering science | Information science |
| Macquarie University (Australia) | ① Department of Biological Science<br>② Department of Molecular Science<br>③ Department of Chiropractic Science<br>④ Department of Computing<br>⑤ Department of Earth and Planetary Sciences<br>⑥ School of Engineering<br>⑦ Department of Envionmental Sciences<br>⑧ Department of Mathematics and Statistics<br>⑨ Department of Physics and Astronomy | All divisions |

# S tudent Support

## ❚ A supportive research environment for students

### Rated top class for research among Japanese national universities

In the Evaluation of Achievements for the Phase 2 Medium-term Goals (2010-2015), NAIST was evaluated as "Extremely Excellent", the highest evaluation possible. (One of only 5 institutions evaluated such out of 86 national Japanese universities. Also, in the "Benchmarking Research Capability of Japanese Universities 2015" survey (performed by the MEXT and NISTEP), our high level of research was evaluated with NAIST being ranked 2nd among Japanese national universities. Additionally, the average institutional research budget for each NAIST faculty member for the FY2019 was 6 million yen, more than double the national average.

### Personalized education and research advising for students

With a 6:1 student-to-faculty ratio (FY2019), nearly half the 10:1 average ratio for Japanese national institutions, NAIST students are regularly able to take advantage of individual advising opportunities. In addition to the main supervising professor, students are also assigned at least one sub-supervising professor to allow for guidance from different fields and to facilitate a broad understanding of their research. Furthermore, NAIST's campus is physically compact and the educational structure is organized to encourage collaboration and developments in both education and research across traditional academic fields.

## ❚ Examination, enrollment and tuition fees

| Enrollment type | Examination | Enrollment | Tuition |
|---|---|---|---|
| Master's and Doctoral Program Students | JPY 30,000 | JPY 282,000 | JPY 267,900/semester (JPY 535,800/year) |
| Research Students | JPY 9,800 | JPY 84,600 | JPY 29,700/month |
| Special Research Students (Short-term Exchange Students) | — | — | JPY 29,700/month |

Note: If tuition is revised, the new fees will be applicable.

(as of October 2020)



## ❚ A wide variety of financial support options

### Japanese Ministry of Education, Culture, Sports, Science & Technology (MEXT) Scholarship

MEXT offers competitive, full scholarships to excellent overseas students and researchers to study in Japan and chosen students receive comprehensive support (Tuition and other fee exemption, monthly stipend, travel expenses) so they may focus on their studies and research. There are two types of MEXT scholarships, embassy and university recommendation through International Priority Graduate Programs.

### NAIST International Scholar Program

This program is offered to talented partner institution students to study at NAIST while being Research Assistants, gaining valuable, hands-on research experience. NAIST Scholars are exempted from tuition and other fee payment, and receive a research assistantship salary and partial transportation cost reimbursement.

### Other government and private scholarships

Every year a select number of privately financed international students receive JASSO and other private scholarships exclusively for NAIST students. Additionally, multiple scholarships specifically for international students are offered by private companies and foundations.

### Teaching and research assistantships

In addition to NAIST Scholars, NAIST actively supports exceptional students with student and research assistantships, where they receive a salary for taking on different roles in the lab and classroom.

### Affordable on-campus housing

For international students studying in Japan, housing is an expensive and time-consuming issue. All full-time international students are eligible for on-campus housing with free internet access. Housing fees range from JPY 10,000 – JPY 15,000 for single, couple or family housing, which are about one third or less of average Japanese housing costs. A new apartment-style dormitory where Japanese and international students will live together to foster cultural understanding will open in April 2021.



### International Student Affairs Section

The International Student Affairs Section is the first section that international students deal with when they begin their procedures for studying at NAIST. Starting with admissions assistance and visa procedures, the International Student Affairs Section manages international student registration, offers administrative support for international students concerning their status in Japan and handles Japanese government and other scholarships. The experienced staff also offers advice to students as they live and study at NAIST. Additionally, the section works with a citizen group to maintain a Japanese language program and arranges Japanese cultural excursions every year.

### Center for International Students and Researchers (CISS)

CISS was started as part of NAIST's commitment to supporting its growing international community, which consists not only of students, but also students' families, international researchers and faculty, and their families as well. CISS cooperates with administration offices across the campus to offer support in areas both on and off campus, while also working with local government offices to assure the international community in and around NAIST are able to make the most of their time at NAIST and in Japan

# Campus Life

## Studying at NAIST

I cycle to the nearby market for grocery shopping, travel with friends, and join international student bus tours to explore the beauty of Nara. I also chat with my family in Malaysia online.

**My usual weekday**

08:00 Morning routine & breakfast
09:00 Head to the campus & my lab
09:10 Start research activities/
      attend classes
12:00 Lunchtime
13:00 Back to research/
      afternoon classes
18:30 End my day in the lab
19:00 Dinner & down time
      (Relaxation, exercise, etc.)

**To relax**

### Hu Hooi Ting

2nd year master's student from Malaysia studying in the Molecular Medicine and Cell Biology Laboratory
(Division of Biological Science)

I spend time with friends, working out and watching movies together. I also go to the library to read Japanese magazines to improve my Japanese.

**Life in the dormitory**

The Recycling Market (organized by international students) helped me get settled when I arrived. The lounge room is a nice place to organize meetings/parties with other students.

**To relax**

### ABURTO GUTIERREZ MARIO EDUARDO

1st year doctoral student from Mexico studying in the Mathematical Informatics Laboratory (Division of Information Science)

Social activities are important for me to relax and to revitalize myself. I enjoy practicing kung fu on campus and outside workouts with friends in a park nearby.

**My monthly budget**

With the dormitory reducing living expenses, my scholarship allows me to pursue my studies without thinking about my finances.

<Expenses>
Dormitory: JPY 10,000
Food, etc.: JPY 40,000
Utilities: JPY 2,500
Cellphone/network: JPY 1,700
Entertainment, etc.: JPY 40,000

## Student activities and events

Internship student weekend excursion to Osaka

Japanese drum performance in the nearby Takayama Science Festival
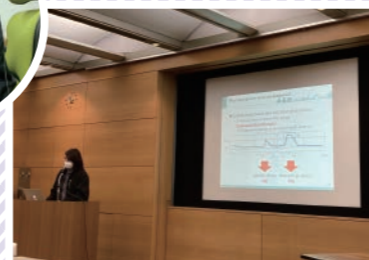
Nara Prefecture international students learning how to make sushi

The student-run Recycling Market for international students

Interactive Media Design Lab student visiting the University of Primorska for a lab stay

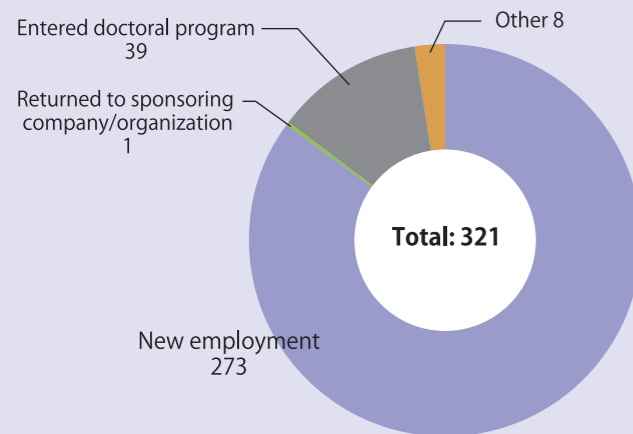A Ubiquitous Computing Systems Lab student presenting at MUSICAL 2021

Biological Science Summer Camp poster presentation

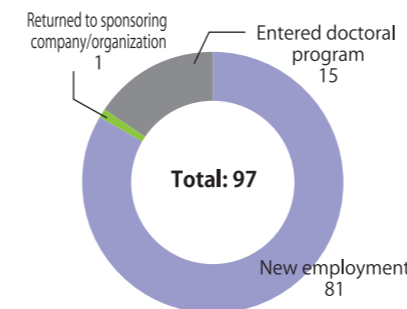Indonesian students playing the traditional instrument "Angklung"

# Careers after NAIST

## 2019 Master's Course Graduates
### All Education Programs combined

Entered doctoral program 39
Returned to sponsoring company/organization 1
Other 8
New employment 273

**Total: 321**

**99%** of graduates looking for employment found positions

## 2019 Doctoral Course Graduates
### Graduate School of Science and Technology

Entrepreneur 1
Other 8
Employment in business 20
Post-doctoral fellow 22
Returned to sponsoring company/organization 15
Employment in academia 11

**Total: 77**

Graduates joined companies including: Toshiba Corp., Japan Tobacco Inc., Daikin Industries, Ltd.

## Individual Education Program Graduates

### Program of Information Science and Engineering
Returned to sponsoring company/organization 1
Entered doctoral program 15
New employment 81

**Total: 97**

Graduates joined companies including:
Sony Corp., Panasonic Corp., Yahoo! Japan Corp.

### Program of Computational Biology
Entered doctoral program 2
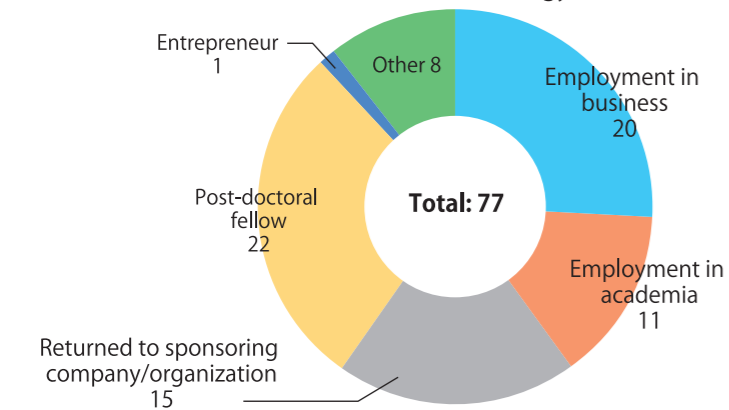New employment 4

**Total: 6**
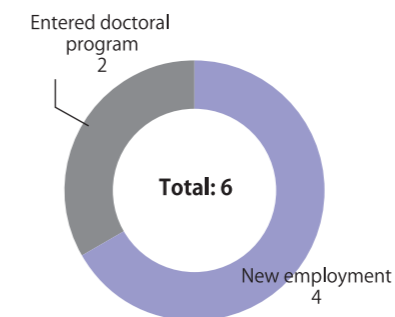
Graduates joined companies including:
Kao Corp., Tata Consulting Services Japan

### Program of Biological Science
Entered doctoral program 5
Other 5
New employment 77

**Total: 87**
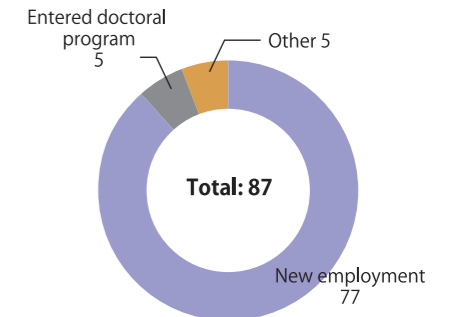
Graduates joined companies including: Asahi Kasei Corp., Kobayashi Pharmaceutical Co., Yakult Honsha Co.

### Program of Bionanotechnology
Entered doctoral program 3
Other 2
New employment 37

**Total: 42**

Graduates joined companies including:
Arkray, Inc., Chugai Pharmaceutical Co., NOF Corp.

### Program of Materials Science and Engineering
Entered doctoral program 5
Other 1
New employment 41

**Total: 47**
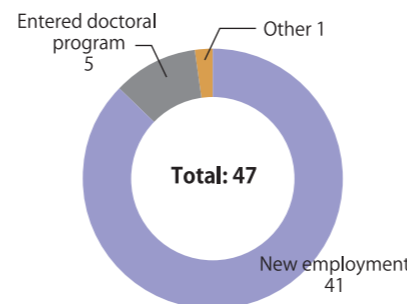
Graduates joined companies including:
Shiseido Co., Toray Industries, Inc., Honda Motor Corp.

### Program of Intelligent Cyber-Physical Systems
Entered doctoral program 3
New employment 15

**Total: 18**
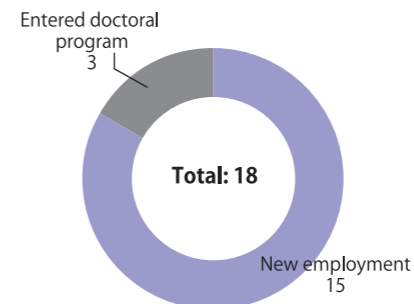
Graduates joined companies including:
Kyocera Corp., Denso Corp., IBM Japan

### Program of Data Science
Entered doctoral program 6
New employment 18

**Total: 24**
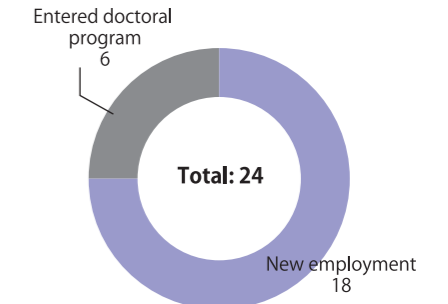
Graduates joined companies including:
NTT Docomo, Shimadzu Corp., Benesse Corp.

# Hear from our Graduates

**Tengda LIN, Ph.D.**
Design Engineer
Alchip Technologies
Graduated in 2020

### Life in Japan
I spent three years in Nara, with its famous tame deer living among the local people. However, Nara is more famous for its long history and culture, and. I will never forget the days I discovered fascinating places around the prefecture, learning about Nara's historic importance and enjoying the peaceful natural scenery. The developed transportation system and shopping malls everywhere make daily life convenient. My life in Japan was, without doubt, enjoyable and fulfilling.

### My Experience at NAIST
Located in the peaceful countryside away from the bustle of the city, the atmosphere is very suitable for research. As a first-class research institute in Japan, NAIST provided me the chance to receive guidance from distinguished faculty and conduct experiments using state-of-the-art equipment. NAIST's international network of partner institutions allowed me to make friends and connections around the globe. Through the overseas internship program, I gained much through a 3-month stay at a laboratory of Compound Semiconductor Technology, RWTHAACHEN University, which is first-rate in my field. On weekends, support organizations often organize Japanese culture and Nara area international student activities. No matter what my future brings, everything I learned and experienced when at NAIST will always be a treasure for me and I am grateful for the opportunity challenge myself there.

**Elder AKPA, Ph.D.**
R&D Innovation Leader
Schneider Electric Japan H.
Graduated in 2019

### Life in Japan
I came to Japan on April 2nd, 2013 and after 7 years I still discover new things and new ways to do things. Living in Japan has positively impacted my life in almost all aspects. Academically, I had the chance to learn from expert professors at a well-ranked, prominent university surrounded by incredibly passionate students. In this kind of environment, you cannot not be a better version of yourself. Professionally, working in Japan allows me to meet Japanese and international colleagues in a working culture that continuously inspires me to improve. Socially, living in Japan helps me better understand Japanese culture and mind. It strengthens in me the value of other people's lives and well-being.

### My Experience at NAIST
At NAIST, what impressed me the most were the opportunities given to students to benefit from their studies and research. When students' work produces results, they are automatically supported by their supervisors and by NAIST. For me, I was able to go to international conferences and publish my results in journals. As a student, this was so exciting and fantastic. One thing I will never forget about NAIST is the kindness and generosity of the International Student Affairs Section and the administration as a whole. These people put all their effort together to help both Japanese and international students. NAIST is the university that I've already recommended to my friends around the world.

## Division for Career Development (DCD)

Established in 2013, DCD provides a wide variety of career support to NAIST students who seek non-academic careers in Japan. In particular, a University Educational Administrator (UEA) is employed specifically to support international students as they maneuver the unique and difficult to understand Japanese job hunting customs and procedures. DCD offers individual counseling to students who seek specific advice and support for their job hunting and also arranges and holds various programming to fully prepare international students as they look towards their next career steps including:

▶ Career guidance sessions to educate students on how to start and proceed with job hunting
▶ Networking events for international students to meet with Japanese companies and learn about the industries in Japan
▶ One-day company visit programs and longer-term internships for students to learn about and experience Japanese company work environments
▶ Special doctoral student "Job Festa" career and networking events for those aspiring to work in industry in Japan

# Campus Map & Facilities

NAIST's campus is a compact area constructed to facilitate campus-wide research, education and interaction, where students, faculty and staff connect with each other daily. In addition to the on-campus housing for students, faculty, and staff, NAIST's secluded campus was created to assist students in focusing on their academic goals by offering support in a variety of areas. The campus's location close to Kyoto and Osaka allows for easy domestic and international travel.

① Administration Bureau
② Library
③ University Union / Health Care Center / Convenience Store
④ Interdisciplinary Frontier Research Complex No. 2
⑤ Millennium Hall
⑥ Guesthouse Sentan
⑦ Information Science Complex / Information Initiative Center
⑧ Biological Science Complex / Research and Education Center for Genetic Information
⑨ Animal Experimentation Facility
⑩ Botanical Greenhouses
⑪ Materials Science Complex / Research and Education Center for Materials Science
⑫ Bio Nano Process Laboratory
⑬ Interdisciplinary Frontier Research Complex No. 1
⑭ Student Dormitories
⑮ Staff Residences
⑯ Administration Bureau Annex

## NAIST Library
As Japan's first full-scale digital library, the NAIST Library is available online 24 hours-a-day throughout the year and the physical library is open 24 hours-a-day as well offering reference materials, study space, etc.

## NAIST One-way Carsharing System
As part of research being performed at NAIST, a carshare system featuring electric vehicles with 4 charging stations on campus which utilizes cryptocurrency has been established to assist the mobility of faculty, staff and students.

## Health Care Center
The Health Care Center staff includes a doctor, nurses and counselors, and they offer medical examinations and assistance, health guidance and mental health counseling for students, faculty and staff.

## Cafeteria
The NAIST cafeteria offers a variety of inexpensive meal options for both lunch and dinner. Dishes range from traditional Japanese foods to western dishes such as spaghetti and curry.

## Convenience store
The on-campus convenience store is open seven days a week and, in addition to foods and beverages, stocks daily amenities and offers utility and other payment services.

Takayama Science Plaza
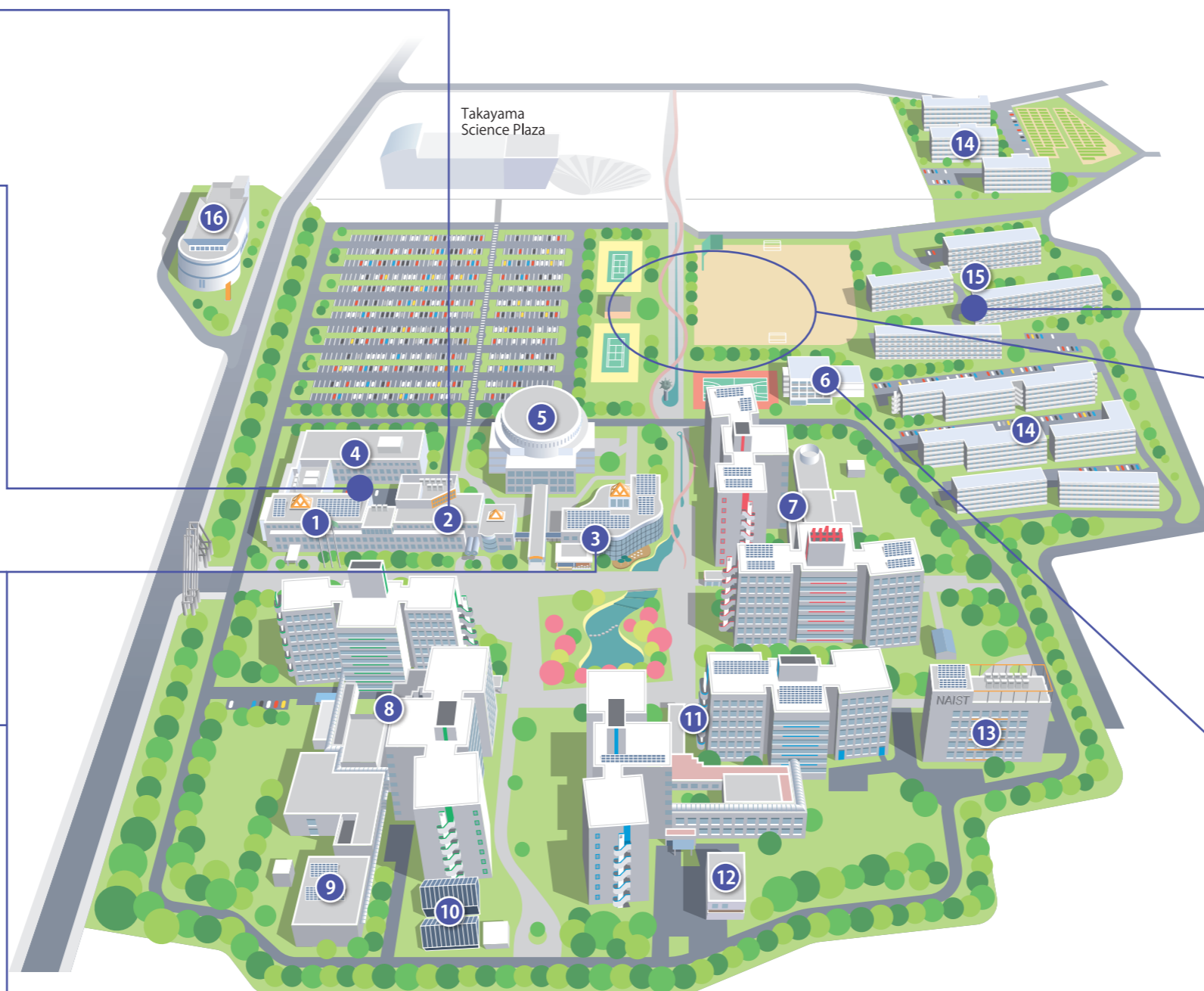
## Rooms for childcare and reproductive health
These rooms have been established along with various child and family care support programs as part of NAIST's efforts to support female faculty and employees' work-life balance.

## Sports facilities
NAIST maintains tennis courts, a basketball/volleyball court, a field for soccer/baseball and a room for table tennis, and the administrative offices offer rental equipment to students, faculty and staff.
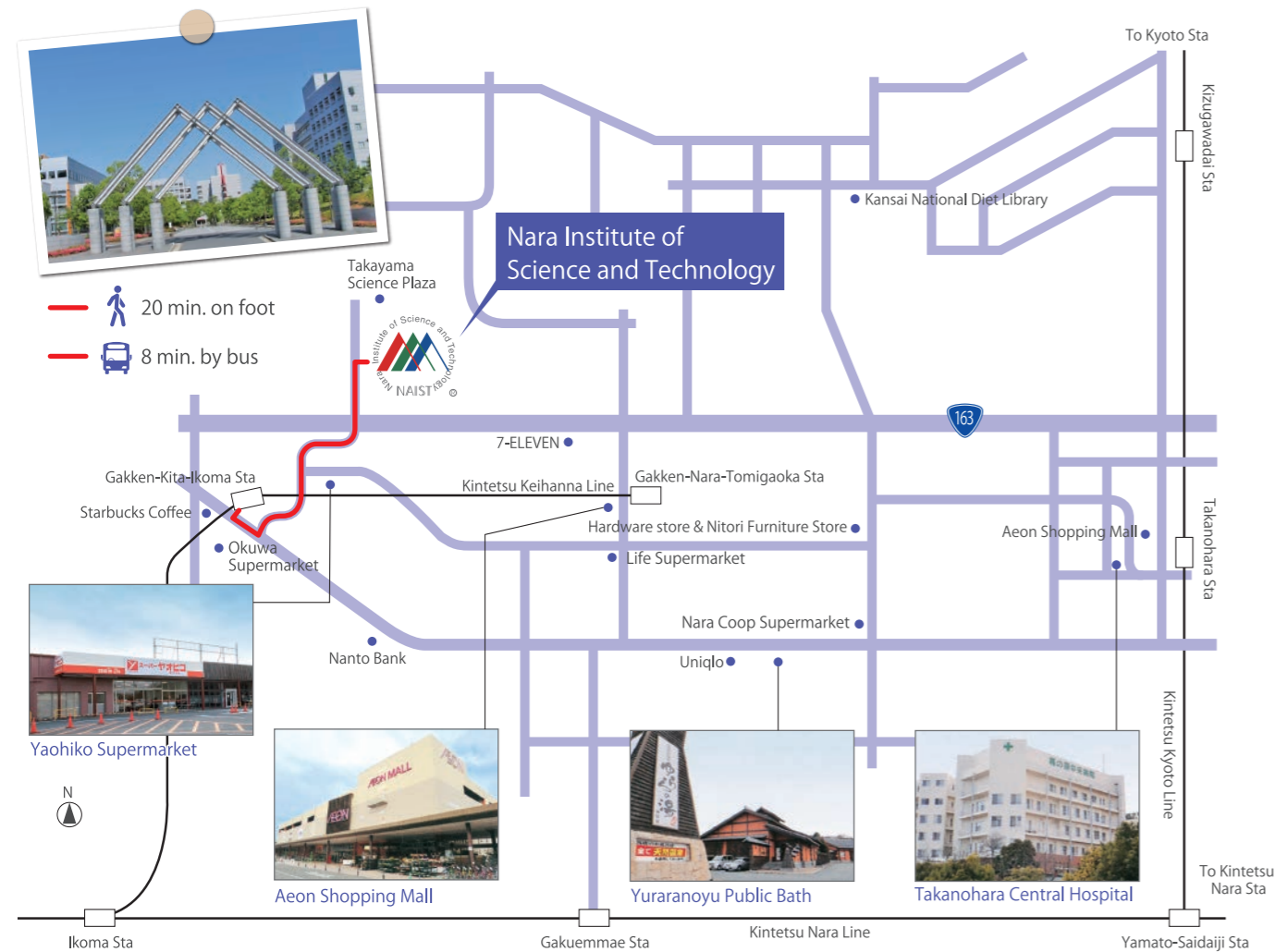
## Guesthouse Sentan
The guesthouse offers reasonable short-term on-campus accommodations for visiting students, researchers, etc. to facilitate collaboration with both international and domestic partners.

## On-campus gym
NAIST has a small gym with various exercise equipment so that students, faculty and staff can maintain their physical health while studying/working on campus.

# Around Campus

20 min. on foot
8 min. by bus

To Kyoto Sta

Kizugawadai Sta

Kansai National Diet Library

Nara Institute of
Science and Technology

Takayama
Science Plaza

163

7-ELEVEN

Gakken-Kita-Ikoma Sta
Kintetsu Keihanna Line
Gakken-Nara-Tomigaoka Sta

Starbucks Coffee

Okuwa
Supermarket

Hardware store & Nitori Furniture Store
Life Supermarket

Aeon Shopping Mall

Takanohara Sta

Nara Coop Supermarket

Nanto Bank
Uniqlo

Yaohiko Supermarket

N

Kintetsu Kyoto Line

Aeon Shopping Mall
Yuraranoyu Public Bath
Takanohara Central Hospital

To Kintetsu
Nara Sta

Ikoma Sta
Gakuemmae Sta
Kintetsu Nara Line
Yamato-Saidaiji Sta

# Reaching NAIST from Domestic Airports

NAIST is only 1.5 hours away from the Osaka International Airport and the Kansai International Airport

| | | | | | | |
|---|---|---|---|---|---|---|
| Osaka International Airport | Airport Limousine Bus 35 min. | Uehommachi Sta | Kintetsu Nara Line Express 17 min. | | | |
| Kansai International Airport | Nankai Line Limited Express Rapid α 34 min. | Namba Sta | Kintetsu Nara Line Express 20 min. | Ikoma Sta | Keihanna Line 6 min. | Gakken-Kita-Ikoma Sta / Nara Kotsu Bus To Science Town 8 min. |
| | JR Limited Express Haruka 60 min. | Tsuruhashi Sta | Kintetsu Nara Line Express 15 min. | | | |
| | Airport Limousine Bus 51 min. | Uehommachi Sta | Kintetsu Nara Line Express 17 min. | | | |
| | Airport Limousine Bus 95 min. | Gakken-Nara-Tomigaoka Sta | Nara Kotsu Bus To Science Town 10 min. | | | |
| Narita International Airport | JR Narita Express 60 min. | Shinagawa Sta | JR Tokaido Shinkansen Nozomi 120 min. | Kyoto Sta | Kintetsu Kyoto Line Express 35 min. | Takanohara Sta / Nara Kotsu Bus To Science Town 20 min. |

NAIST.

# Location

NAIST is located in Ikoma City, in Japan's historic Nara Prefecture. Home of the first official capital of Japan, Nara Prefecture has an incredibly rich history as a center for international trade and relations. In addition to its prolific ancient heritage, Nara Prefecture is also conveniently located in close proximity to Kyoto and Osaka, and just 60 minutes from Kansai International Airport.

Sapporo

Kyoto
Osaka — Nara
30km
60km
100km
Tokyo

NAIST (located in Kansai Science City)
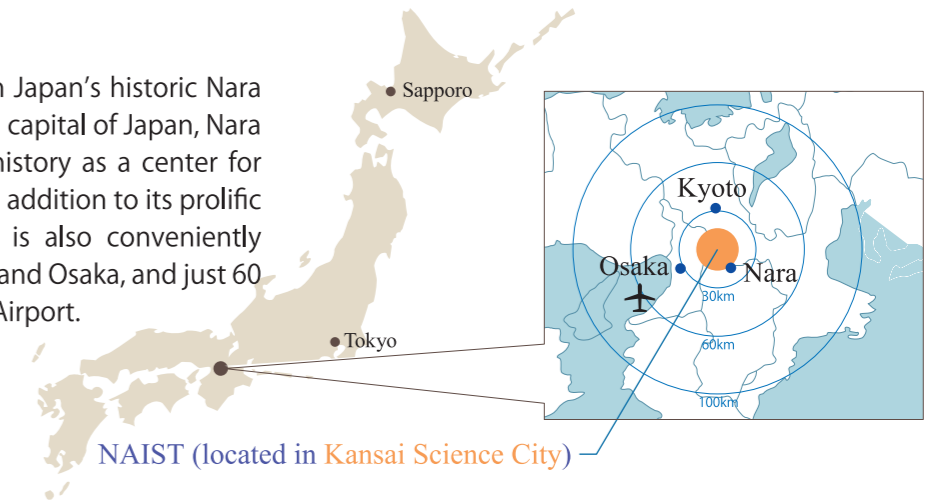
# Contact information

For inquiries concerning:

### Graduate Studies for International Students
International Student Affairs Section, International Affairs Division
Email: ryugaku@ad.naist.jp　　Phone: 0743-72-5087

### International Researchers and Scholars
International Affairs Section, International Affairs Division
Email: kokusai@ad.naist.jp　　Phone: 0743-72-6246

### International Partnerships
Division for Global Education, Institute for Educational Initiatives
Email: dge@ad.naist.jp　　　Phone: 0743-72-6243

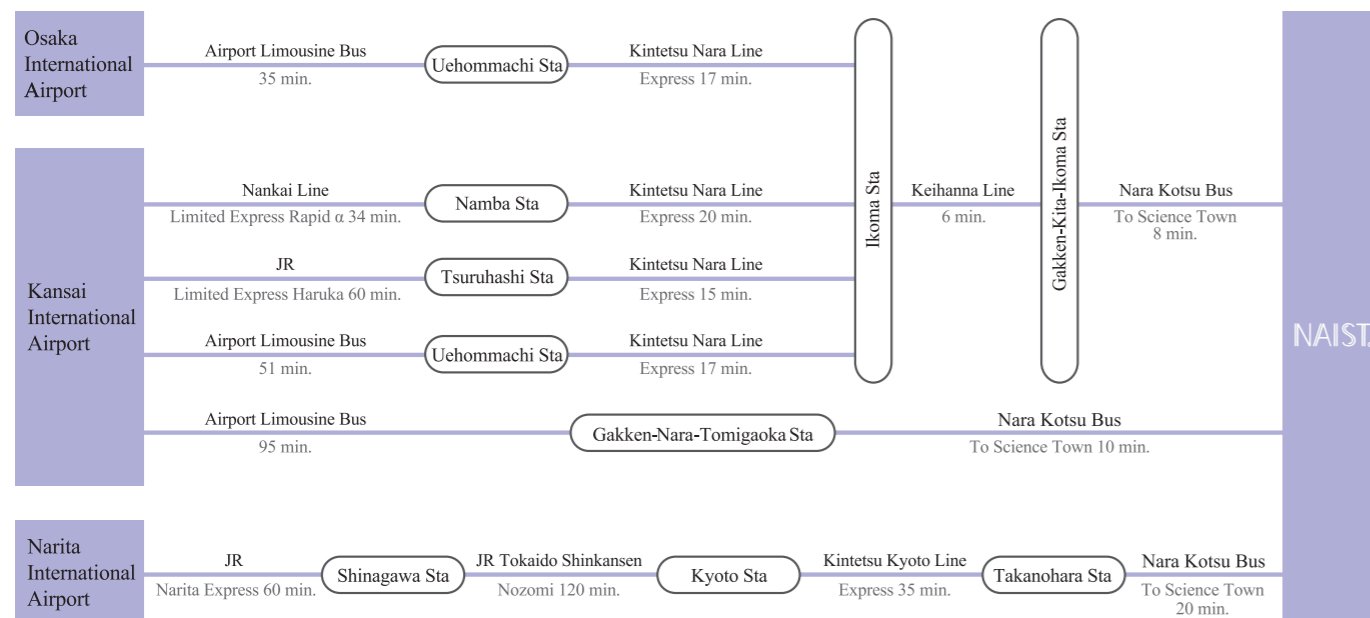**NAIST Website**
https://www.naist.jp/en/

**Division of Information Science**
https://isw3.naist.jp/home-en.html

**Division of Biological Science**
https://bsw3.naist.jp/eng/

**Division of Materials Science**
https://mswebs.naist.jp/english/

# NASURA    In March of 2019 NAIST's mascot was born!

## Origin of Nasura's name
Nasura is a combination of "Nara" (of Nara Prefecture) and "Asura", a superhuman or demigod appearing in Hindu and Buddhist mythology.

## Profile
Date of birth: October 1st
Birthplace: Takayama-cho, Ikoma City, Nara Prefecture

## Personality
Strengths: full of curiosity and a spirit of challenge, highly motivated and hardworking
Weaknesses: a busybody, meddles in others affairs