Japanese Graduate School

NAIST

Nara Institute of Science and Technology

GUIDEBOOK
2024

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 two of their interdisciplinary areas. At present, over 1,200 students—roughly 25% from overseas—are supervised by approximately 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 not only key to 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.

President's Vision 2030

NAIST celebrated its 30th anniversary in 2021 and the President, Dr. Kazuhiro Shiozaki, issued his vision of what NAIST should be in 2030. Upon the foundation laid by its prominent achievements over the past three decades, NAIST will build a campus community that strives for the new development in research and education through "co-creation" with diverse stakeholders. Please use the QR code to view the President's Vision 2030 and find out how NAIST will pursue co-creation to fulfill its mission as a national postgraduate institution.

NAIST Timeline

1991	NAIST established on October 1st (Graduate School of Information Science)
1992	Graduate School of Biological Sciences and Information Technology Center established
1996	Graduate School of Materials Science established
2004	NAIST became a National University Corporation, Industry-Government-Academia Collaboration Group established
2010	Information Initiative Center and Research Center for Advanced Science and Technology established
2013	Career Services Office established
2015	Center for Strategy and Planning, Institute for Educational Initiatives and Institute of Research Initiatives established
2017	Data Science Center established
2018	Three original graduate schools merged to create Graduate School of Science and Technology
2021	Center for Digital Green-innovation and Regional Co-creation Office established
2023	Life Science Collaboration Center and Center for Material Research Platform established

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.
779	384	79

Total: 1242 (International students: 26%)

(As of November 2023)

▌ NAIST Faculty and Staff

Executive administration	Faculty	Staff
8	186	165

Total: 381 (International faculty and staff: 5%)

(As of May 2023)

▌ High Percentage of External Revenue
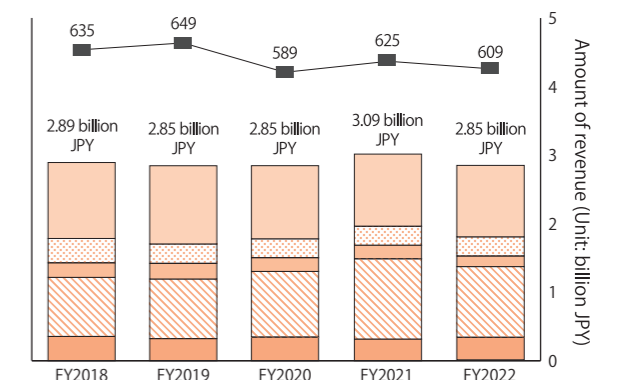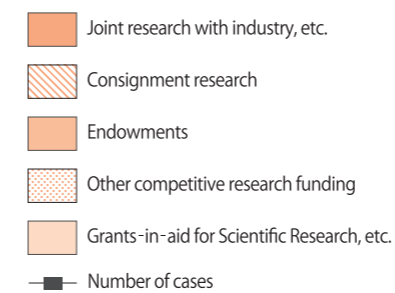
FY2022 Revenue: Total 10.5 billion (JPY)

- Infrastructure, other 4.3%
- Tuition 5%
- External revenue 33.2%
- Administrative subsidy 57.5%

External Revenue Breakdown (As of March 2023)

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

	FY2018	FY2019	FY2020	FY2021	FY2022
Number of cases	635	649	589	625	609
Amount	2.89 billion JPY	2.85 billion JPY	2.85 billion JPY	3.09 billion JPY	2.85 billion JPY

Amount of revenue (Unit: billion JPY)

▌ High Allocation of Educational Research Funding

FY2022 Expenses: Total 9.9 billion (JPY)

- Facilities, etc. 22.3%
- Personnel 45.4%
- Educational research funding 32.3%

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.
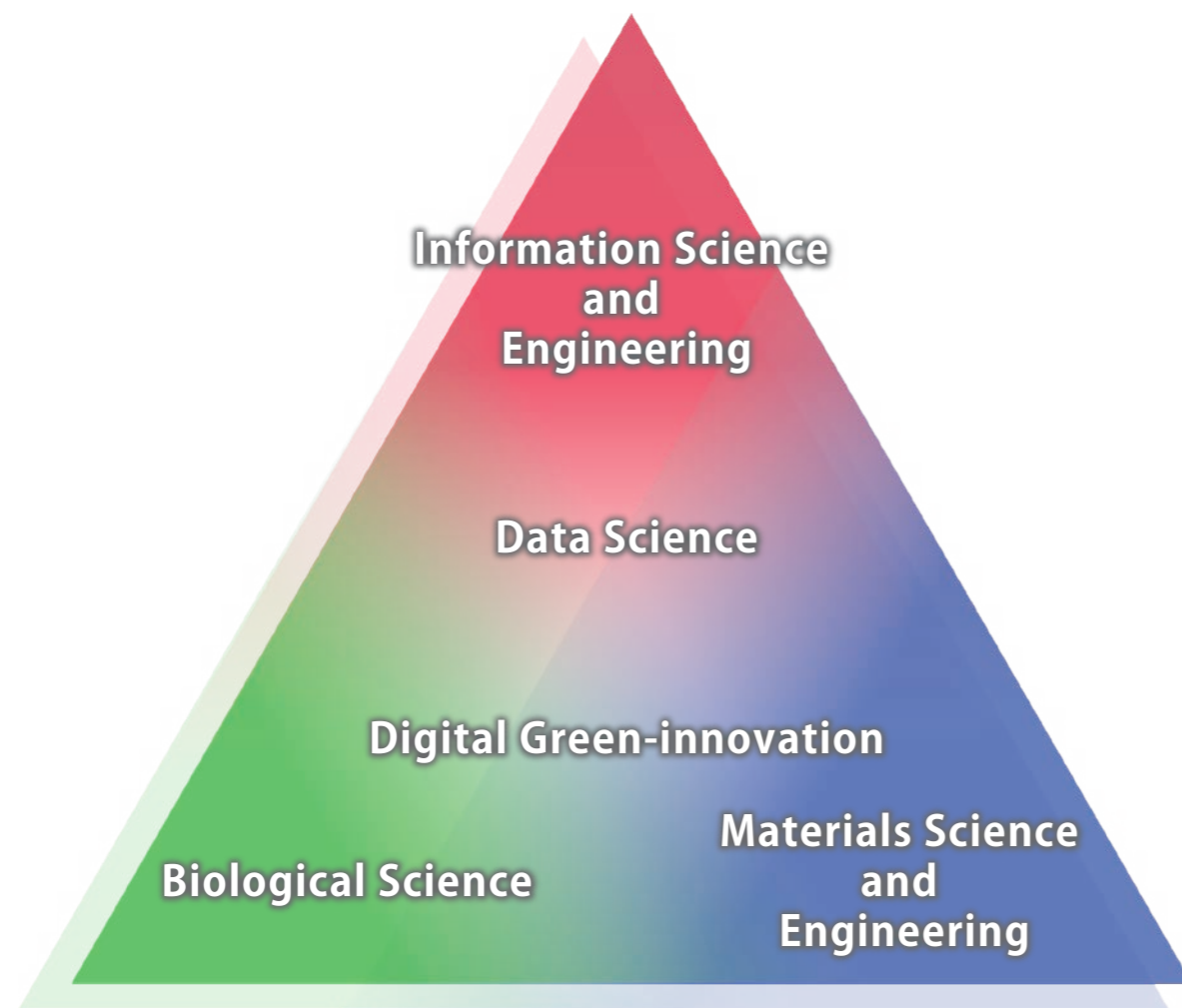
Sapporo

Tokyo

Kyoto

Osaka　Nara

30km
60km
100km

NAIST (located in Kansai Science City)
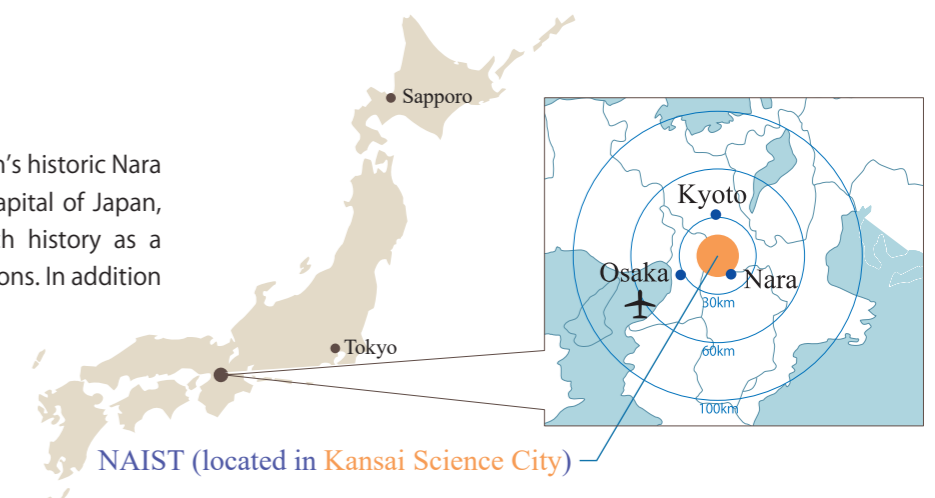
NAIST's Educational Structure

❚ 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.

❚ Multidisciplinary-focused Education Programs

The five 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 they will pursue depending on their studies and the focus of their research.

Information Science and Engineering

Data Science

Digital Green-innovation

Biological Science

Materials Science and Engineering

Education Programs

❚ Facilitating research in leading-edge science and technology

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

A focused program fostering students to support our dynamic advanced information society, implementing further achievements in diverse fields. This program cultivates specialized knowledge and skills in computer hardware/information network technology, computer/human interaction and media technology, and computer systems to utilize robotics.

Biological Science
Degrees granted: Master's / Doctorate (biological science)

A focused biological science program which fosters students who are able to contribute to the development of humankind and the conservation of the global environment through research and development related to the environment, energy, food and natural resources, and human health and longevity by equipping them with cutting-edge knowledge and skills in a wide range of fields, from the basic principles of life phenomena to the diversity of living organisms in animals, plants, and microorganisms.

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

A focused program fostering students with foundational knowledge of materials science and advanced knowledge to fully utilize their expertise in 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 and support societal development.

Data Science
Degrees granted: Master's / Doctorate (engineering, science, biological science)

An interdisciplinary program fostering students with a wide range of expertise in data- and AI-driven sciences in information, biological, and materials sciences, to find hidden 'value' and 'truth' through data processing, visualization, and analysis of huge amounts of data to contribute to science, technology, and societal development.

Digital Green-innovation
Degrees granted: Master's / Doctorate (engineering, science, biological science)

An information, biological, and materials sciences interdisciplinary program which fosters students with advanced expertise in these three fields which support society and the economy, as well as comprehensive backgrounds to understand the adjacent interdisciplinary research fields, especially the interdisciplinary fields that encompass green and digital fields. These students can approach issues from various perspectives throughout society and will lead the utilization of digital green science and technology, which continues to develop in the green and digital fields, and innovation in society.

❚ Education Programs that can be selected for each Division

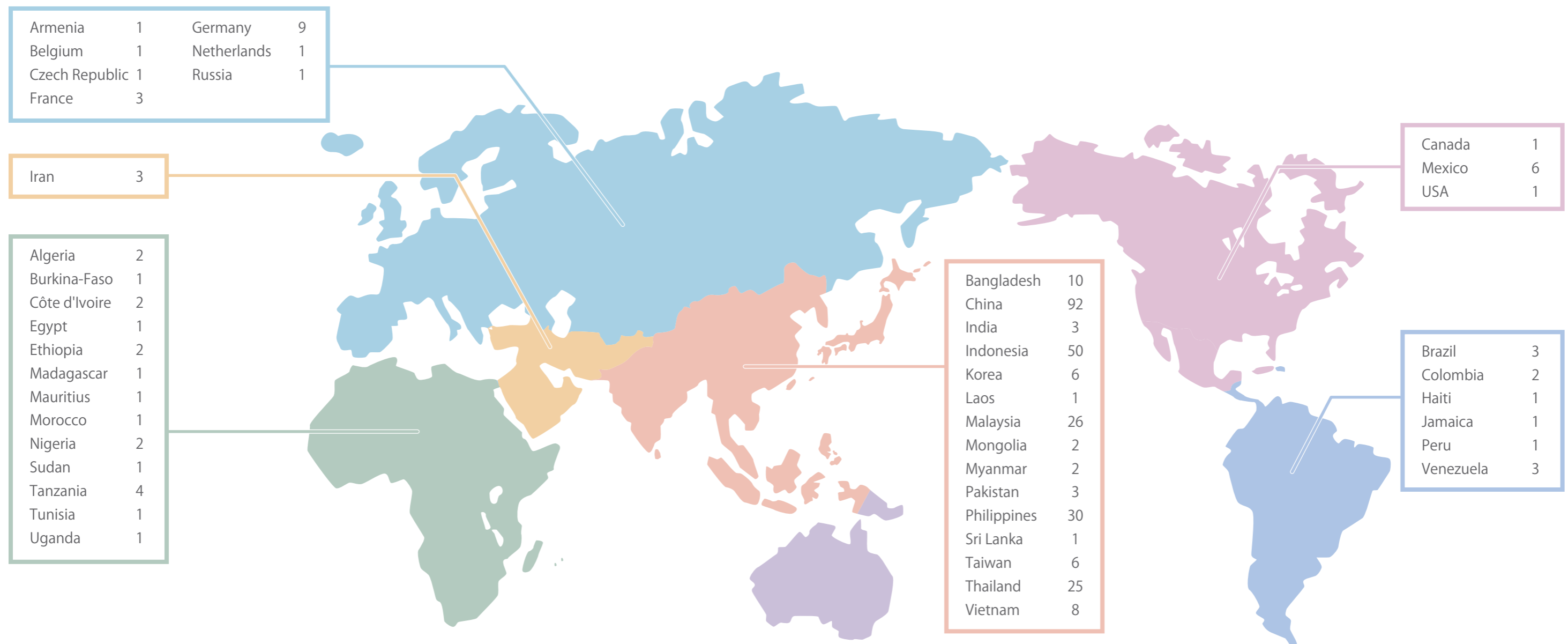|		Information Science and Engineering	Biological Science	Materials Science and Engineering	Data Science	Digital Green-innovation
Division	Information Science	○			○	○
	Biological Science		○		○	○
	Materials Science			○	○	○

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.

▌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.

▌International collaborative research network

Overseas and on-campus collaborative laboratories

NAIST maintains several international research laboratories on campus and at partner institutions where faculty reside to facilitate collaborative research and strengthen institutional ties.
▶University of California Davis (USA)
▶University of British Colombia (Canada)
▶Université Toulouse III - Paul Sabatier (France)
▶École Politechnique (France)
▶National Yang Ming Chiao Tung University (Taiwan)

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)

International Student Enrollment

(As of November 2023)

Armenia	1	Germany	9
Belgium	1	Netherlands	1
Czech Republic	1	Russia	1
France	3		

Iran	3

Algeria	2
Burkina-Faso	1
Côte d'Ivoire	2
Egypt	1
Ethiopia	2
Madagascar	1
Mauritius	1
Morocco	1
Nigeria	2
Sudan	1
Tanzania	4
Tunisia	1
Uganda	1

Canada	1
Mexico	6
USA	1

Bangladesh	10
China	92
India	3
Indonesia	50
Korea	6
Laos	1
Malaysia	26
Mongolia	2
Myanmar	2
Pakistan	3
Philippines	30
Sri Lanka	1
Taiwan	6
Thailand	25
Vietnam	8

Brazil	3
Colombia	2
Haiti	1
Jamaica	1
Peru	1
Venezuela	3

Agreements on Academic Exchange with 101 Overseas Institutions in 26 Countries/Regions

(As of January 2024)

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

Bangladesh
Bangladesh University of Engineering and Technology

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

India
KIIT College of Engineering
Indian Institute of Technology, Jodhpur
Indira Gandhi Delhi Technical University for Women

Indonesia
Gadjah Mada University
IPB University
University of Indonesia
Hasanuddin University
Bandung Institute of Technology
Jenderal Soedirman University
Electronic Engineering Polytechnic Institute of Surabaya
Institut Teknologi Sepuluh Nopember

Korea
Hanbat National University

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

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

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

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
Posts and Telecommunications Institute of Technology HCMC Campus

Europe

Belgium
Université Catholique de Louvain

France
Université Toulouse III - Paul Sabatier
Ecole Polytechnique
Ecole Normale Superieure Paris-Saclay
Telecom Paris
Sorbonne University
University of Paris-Saclay
Universite de Rennes
ESIGELEC
Ecole Normale Superieure de Lyon (ENS de Lyon)
The University of Picardie Jules Verne
University Bourgogne Franche-Comté (UBFC)

Germany
RWTH Aachen University
Justus Liebig University Giessen
Karlsruhe Institute of Technology
University of Regensburg
Coburg University of Applied Sciences and Arts
DFKI (The German Research Center for Artificial Intelligence)

Italy
University of Cagliari
University of Trento

Russia
Peter the Great St. Petersburg Polytechnic University

Spain
University of Granada

UK
University of Edinburgh

North America

Canada
Queen's University at Kingston

USA
University of California, Davis
University of California, San Diego
Mississippi State University
Lawrence Berkeley National Laboratory (LBNL), Joint Genome Institute (JGI)

South America

Brazil
Universidade Federal de São Paulo

Africa

Senegal
Cheikh Anta Diop University

Oceania

Australia
The University of Newcastle
University of Adelaide

New Zealand
Unitec Institute of Technology

School/Department Level Agreements

■ Information Science

Asia

China
School of Information Science and Engineering, Yunnan University

Korea
Graduate of IT Engineering, Kyungpook National University

Vietnam
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

Finland
Faculty of Medicine, University of Turku

France
Telecom SudParis
École Supérieure d'Ingénieurs en Électrotechnique et Électronique (ESIEE) Paris
École nationale supérieure d'ingénieurs de Caen (ENSICAEN)

Germany
Faculty of Engineering and Computer Science, University of ULM
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

UK
Department of Statistical Science, University College London

South America

Brazil
Departments of the University of San Paulo

■ Biological Science

Asia

Bangladesh
School of Health and Life Sciences, North South University

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

Vietnam
Institute of Biotechnology, Vietnam Academy of Science and Technology

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

India
Indian Institute of Science Education and Research, Thiruvananthapuram

Taiwan
Institute of Biophotonics, National Yang Ming Chiao Tung University

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

Europe

Austria
Institute of Solid State Physics, Graz University of Technology

Germany
Faculty of Engineering, RheinMain University of Applied Sciences

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

Switzerland
Faculty of Science, University of Zurich

North America

USA
Macromolecular Science & Engineering Program, University of Michigan

Double Degree Programs

In the double degree program, students are enrolled at NAIST and one of our partner institutions, and upon completing the program, following research guidance from both institutions' faculty, receive degrees from both institutions. Currently, NAIST offers doctoral course double degree programs with 7 international partner institutions and a master's course double degree program with Kasetsart University.

Partner institution	Country/region	Faculties, colleges, and areas	Research areas at NAIST
Macquarie University	Australia	① Department of Biological Science ② Department of Molecular Science ③ Department of Chiropractic Science ④ Department of Computing ⑤ Department of Earth and Planetary Sciences ⑥ School of Engineering ⑦ Department of Environmental Sciences ⑧ Department of Mathematics and Statistics ⑨ Department of Physics and Astronomy	All divisions
Université Toulouse III - Paul Sabatier	France	All fields with a counterpart in NAIST	Materials Science
Université Paris-Saclay	France	All fields with a counterpart in NAIST	All divisions
Sorbonne Université	France	Information science	Information Science
Ulm University	Germany	Computer science and engineering science	Information Science
National Yang Ming Chiao Tung University	Taiwan	① College of Science ② College of Electrical and Computer Engineering ③ College of Engineering	All divisions
Chulalongkorn University	Thailand	Biochemistry and molecular biology, Faculty of Science	Biological Science
Kasetsart University (Master's course)	Thailand	Faculty of Engineering	Materials Science

Student Support

A supportive research environment for students

Rated top-class for research among Japanese national universities

In 2021, of all the respected national universities, NAIST was ranked extremely high for both Grant-in-aid for Scientific Research funding received and number of papers published (both of these are per individual faculty member), being ranked second in both areas. Also, in the MEXT Intermediate Evaluation of the 3rd Mid-term Target Period, NAIST was one of two institutions whose education and research were both evaluated highly as "having made significant progress." Furthermore, the average institutional research budget for each NAIST faculty member for the 2022 fiscal year was over 6 million yen, far surpassing double the national average.

Personalized education and research advising for students

With a 6:1 student-to-faculty ratio (FY2022), almost 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) Undergraduate Internship Students	—	—	JPY 29,700/month

*Tuition may be waived for students from partner institutions.

(As of April 2023)
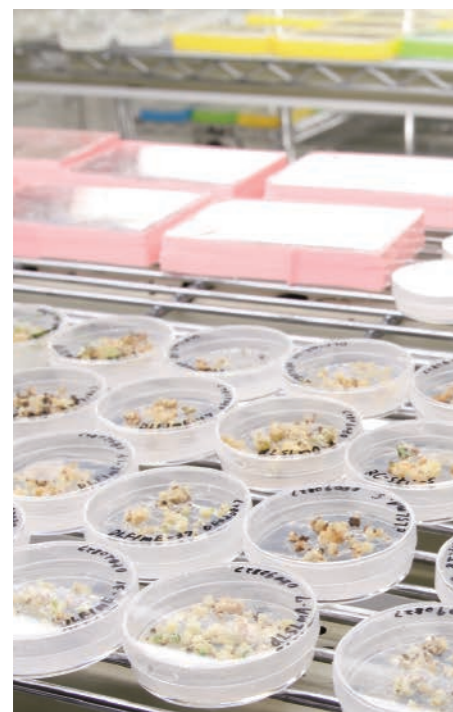
A wide variety of financial support options

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, which include 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 scholarships, embassy and university recommendation. (International Priority Graduate Programs, etc.)

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 airfare to Japan.

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 the NAIST International Scholar Program, NAIST actively supports exceptional students with teaching 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. Housing fees range from JPY 10,000 - JPY 15,000 for single, couple or family housing, less than one third of average Japanese housing costs. A new apartment-style dormitory where Japanese and international students live together to foster cultural understanding opened in April 2021.

Apartment-style dormitory ▶

◀ Single housing

International Student Affairs Section (ISAS)

ISAS is the first office that international students deal with when they begin their procedures for studying at NAIST. Starting with admissions assistance and visa procedures, ISAS 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 Scholars (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.

Life at NAIST

Living off-campus

8:00 Breakfast and taking my daughter to school
9:00 Arrive at NAIST and start studying/research
12:00 Lunchtime and relaxing with friends
13:00 Experiments, assignments and part-time job
18:00 Dinner
19:00 Family, friends and playtime
22:00 Housework and free time

Living off campus

Life in the Tomigaoka (Nara) area is truly enjoyable, a perfect balance, not too urban yet not too rural, making it an ideal environment for raising a child and studying. With the train station and NAIST close by, it is a short commute and we can easily check out Osaka, Kyoto, or even explore Kobe. Our most delightful moments involve riding bikes and exploring nearby cafes and parks.

On my days off

Mostly, we explore the outdoors in the Kansai area. In nice weather, we enjoy discovering new areas by bicycle. During rainy or hot weather, we opt for indoor activities, such as playgrounds, shopping malls, and exploring Asian cuisine with friends.

Ani HOVHANNISYAN
1st year doctoral student from Armenia studying in the
Software Engineering Laboratory
(Division of Information Science)

Student comment

Don't let anything stop you from learning a language or achieving the goals you have when you come to Japan.

Living on-campus

My usual weekday

In my first year, a set schedule for required classes, Japanese classes, lab meetings, and lab study groups. My second year is flexible and I spend most of my time on my research project, meetings, job hunting, studying Japanese, reading manga, and going on trips!

On my days off

I love going on trips, hiking, restaurant hopping, izakaya, karaoke, and visiting historic and cultural sights. Also, I enjoy visiting my favorite onsen with friends to unwind. There are many opportunities to participate in events like monitor tours, often involving fun activities and provide a chance to immerse yourself in Japanese culture. I highly recommend registering for these.

Cargill Dujohn SEIVERIGHT
2nd year master's student from
Jamaica studying in the
Natural Language Processing Laboratory
(Division of Information Science)

Life in the dormitory

I'm more of a function over aesthetics kind of guy, so my room is quite plain. I don't collect much stuff, but I still need to be strategic with my limited space. I highly recommend getting adhesive hooks, stackable storage containers, and drawers. Aside from that, I have two carnivorous plants and two Jamaican pepper plants that I try my best to take care of. It's grounding to tend to them daily, or at least most of the time.

My monthly budget

Dormitory, utilities, etc.: JPY 16,000
Food & groceries: JPY 38,000
Mobile plan & subscriptions: JPY 8,000
Transportation: JPY 10,000
Health insurance and medical costs: JPY 3,000
Trips, online shopping, gifts, etc.: JPY 46,000

Student comment

Put yourself out there and don't hesitate to join different groups and attend events!
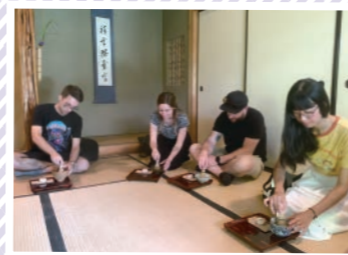
Student activities and events

One Day Excursion

Nagashi Somen

Hanami
(Cherry blossom viewing)

Japanese Cultural Experience
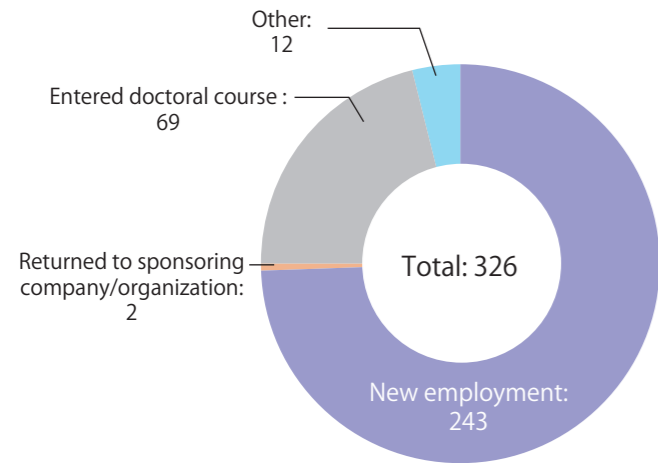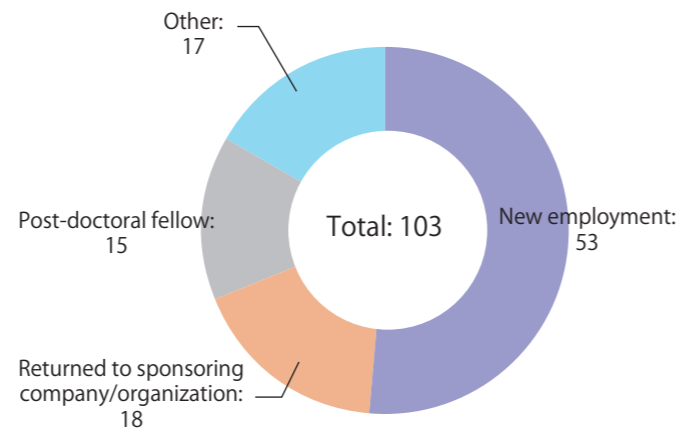
New Year's Calligraphy Event

NAIST Stage

Careers after NAIST

▌Paths after Graduation

Master graduates in academic year 2022

Other: 12

Entered doctoral course: 69

Returned to sponsoring company/organization: 2

Total: 326

New employment: 243

Doctor graduates in academic year 2022

Other: 17

Post-doctoral fellow: 15

Total: 103

New employment: 53

Returned to sponsoring company/organization: 18

99% of graduates looking for employment found positions

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, two University Education Administrators (UEA) are employed specifically to support international students as they maneuver the unique and difficult to understand Japanese job hunting customs and procedures.

▌Career Support Programs for International Students

Career Guidance	Career Counseling	Career Events
Career guidance sessions to educate students on how to start and proceed with job hunting in Japan	International student career consultation service available in English	Career events for international students and HR/R&D divisions of Japanese companies with global vision

Reference materials for job hunting are available to read and borrow in our office. It is also possible to read the job-hunting reports of our alumni.

Hear from our Graduates

Life in Japan

Being fascinated by Japanese culture since childhood, coming and studying in Japan is always my dream. Besides my academic work, I got many opportunities to travel around Nara and Kansai cities, where the history spanning thousands of years is really amazing to me. Moreover, my daily life which was supported by the clean environment, safe food, and warmhearted staff and friends really touched me. By the way, Japanese "sushi" and "ramen" are my favorite.

My Experience at NAIST

From my academic and private experiences, in my mind, NAIST is no doubt the best place for research in Japan. NAIST gathers a group of energetic professors only conducting graduated courses, in other words, students have access to more research resources than normal universities. Besides that, NAIST supports students to visit abroad to exchange ideas with the world's scientists. In addition to this academic support, the low-cost dorm located on campus allowed me to concentrate on my research without worrying about commuting or rent. Furthermore, if you want to start your career in Japan, make sure to visit the NAIST Career Office, where you can obtain support and guidance throughout the job-hunting process. Here, I want to say that I could not have gotten my current position in Ritsumeikan University without the generous help of NAIST Career Office. In a word, NAIST is the perfect place to enjoy both your research and your life.

Chengyan ZHAO, Ph.D.
Assistant Professor
Ritsumeikan University
Graduated Division of
Information Science in 2021

Life in Japan

When I first arrived in Japan in 2017, I still remember the excitement because I was starting a new chapter of life in another foreign country. I am impressed that Japan has a safe environment and good public transportation which makes foreigners living easy and comfortably. Whenever I have troubles, the people here are friendly and kind to help out. In my current workplace, co-workers always share their knowledge and experience with me. They slowly guide me so that I can understand my job well and grow as a valuable person in society. Sometimes, they also bring me out to try local Japanese seafood such as Kinmedai (a fish commonly found in Izu Peninsula) which is new thing for me! I don't know how my future will unfold but the experience that I gained previously makes me feel glad to come to Japan for my studies and career.

My Experience at NAIST

As a top graduate university, NAIST places great emphasize on creating a diverse community and promotes value creation that benefits society through the advancement of science and technology. I believe that NAIST has one of the best environments for students to further their graduate studies in Japan. Students can build solid student-faculty relationships in NAIST because we are free to talk with professors in an exchange of ideas, information and perspectives. NAIST also provides opportunities for students to go abroad for research exchange. During my time at NAIST, I visited UC Davis in America and participated in some cutting-edge experiments. Moreover, students can also get tremendous support from International Student Affairs Section whenever they need counseling on student life such as dormitory and exchange events. Finally, please pay a visit to Division for Career Development (DCD) if you are interested in workimg in Japan after graduation. Through consultation with DCD staff, I have obtained a lot of information regarding job hunting and landed my first job in life after graduation. I feel that studying in NAIST has made a big impact on both my education and career development.

Yen Siang WONG, Ph.D.
Researcher
Sunstar Group
Graduated Division of
Biological Science in 2022

Life in Japan

When I first arrived in Japan as a graduate student, the only Japanese words I knew were greetings. Although it made me nervous at first, living in Japan is much easier than I expected. Being able to have a daily conversation is more than enough to comfortably settle down and enjoy day-to-day life. Japan is also one of the safest countries in the world. I am never worried even if I have to go out alone. The culture that is built on empathy and cutting-edge technology made me come to love Japan. I came to Japan with the intention of finishing my degree and returning to my home country, but I ended up falling in love with Japanese culture and decided to stay and work here.

My Experience at NAIST

The student support program at NAIST provides opportunities for students to develop their skills and encourages them to do so. During my time at NAIST, I had the opportunity to study English in the United States and work as an exchange researcher in Switzerland. I was able to complete research that was accepted by top-ranking conferences in my field and published in a well-known journal thanks to professors' advice and advanced laboratory facilities. Furthermore, the diversity of nationalities among students creates a pleasant environment for both international and Japanese students. I had a terrific time throughout my study, and hanging out with my Japanese and international friends also significantly improved my Japanese and English. Studying at NAIST provided me not just an education but also an opportunity for personal development.

Nattakarn WUTHIBENJAPHONCHAI, Ph.D.
Prototype Development Engineer
Sony Semiconductor Solutions
Corporation
Graduated Division of
Materials Science in 2020

Information Science

Areas of Research and Education

Computer Science Laboratories

Computing Architecture

Prof. Yasuhiko Nakashima
Affiliate Prof. Mutsumi Kimura
Affiliate Prof. Renyuan Zhang
Assist. Prof. Yirong Kan
Assist. Prof. Hoai Luan Pham

One of JST's advanced carbon-neutral technology development and green computing bases. From supercomputing to IoT, we propose, assess, and disseminate new computational foundations essential for an energy-efficient society. Starting with simulator design and progressing through research processes encompassing implementation into high-capacity FPGAs and LSI design, students acquire skills to optimize systems across layers of devices, hardware, architecture, compilers, and applications for various data flow-centric processes. Such system architects distinguish themselves from ordinary engineers limited to off-the-shelf solutions, emerging as vital talents indispensable for the upcoming era of energy-efficient societies.

AI accelerators, cryptographic accelerators, stochastic computing, brain computing, large-scale FPGA/GPGPU/LSI environments

Dependable System

Prof. Michiko Inoue
Adjunct Prof. Fukuhito Ooshita
Adjunct Assoc. Prof. Michihiro Shintani
Assist. Prof. Ryota Eguchi

Today's information society is supported by various levels of advanced technology such as applications, systems, computers and VLSIs. The Dependable System Laboratory is pursuing research on safe and secure systems including distributed systems with hundreds of computers and VLSIs with billions of transistors. Dependability is a concept from the user's point of view, when systems can be used reliably and securely.

Distributed algorithms, self-stabilizing algorithms, population protocols, randomized distributed algorithms, random walks, mobile agent algorithms, robot swarms, VLSI design for testability, machine-learning-based test optimization, dependability of emerging memory systems, hardware Trojan detection

Ubiquitous Computing Systems

Prof. Keiichi Yasumoto
Assoc. Prof. Hirohiko Suwa
Assist. Prof. Yuki Matsuda
Assist. Prof. Tomokazu Matsui

Our goal is to realize IoT technology to acquire data from things in the real world, AI technology to efficiently and accurately analyze acquired data, and feedback technology to effectively reflect the findings of analysis in the real world, which are necessary for the realization of Society 5.0. Our laboratory conducts education and research from both theoretical and practical perspectives, ranging from basic research on various elemental technologies to the construction of actual systems that use these technologies.

IoT/CPS, ubiquitous computing, mobile computing, edge computing, smart homes, smart life, smart cities, participatory/ social/ mobile sensing, behavior change, federated learning, privacy protection

Software Engineering

Prof. Kenichi Matsumoto
Affiliate Prof. Takashi Ishio
Affiliate Assoc. Prof. Hideaki Hata
Assist. Prof. Raula Gaikovina Kula
Assist. Prof. Kazumasa Shimari

Our laboratory performs research and education on the fundamentals and innovative technological trends of software engineering, including how contemporary software development teams make and maintain software, especially when using open source software. Topics include code analysis at the project level for automated tool support, empirical mining software artifacts to test assumptions, and human communication at both project and larger ecosystem levels. We strive to help build, use and maintain software to benefit society.

Program analysis, programming education, open source software, software ecosystems, empirical studies, artificial intelligence, mining software repositories, software libraries, software security

Software Design and Analysis

Prof. Hajimu Iida
Assoc. Prof. Kohei Ichikawa
Visiting Prof. Toshinori Takai
Visiting Prof. Yasushi Tanaka
Assist. Prof. Yutaro Kashiwa
Assist. Prof. Toshiki Hirao
Visiting Assist. Prof. Keichi Takahashi

We conduct research on the methods and technologies which support the design/development of software and cloud computing systems, focusing on the analysis/improvement of the software development process. Software technology is increasingly present in our daily lives, including various software-embedded machinery and electronic devices for homes, mobile telephones, and social infrastructures represented by cloud computing systems.

Software development processes, repository mining, software design & verification, cloud infrastructure design, software defined networking (SDN)

Cyber Resilience

Prof. Youki Kadobayashi
Assoc. Prof. Yuzo Taenaka
Assist. Prof. Md. Delwar Hossain
Affiliate Prof. Hiroyuki Inoue
Affiliate Assoc. Prof. Daisuke Miyamoto

Our laboratory pursues resilience of ICT-based society together with lab members and colleagues around the world. Our research ranges from theoretical to practical, and spans across broad technical fields, from binary code, methodology, to even law. The pursuit of resilience (toughness) is an ongoing challenge and central to our motivation.

Cybersecurity, Internet technology, IoT/CPS, privacy, edge computing, applied machine learning, software defined technology, operating systems, distributed systems, industrial control systems (ICS)

Information Security Engineering

Prof. Yuichi Hayashi
Assist. Prof. Daisuke Fujimoto
Assist. Prof. Shugo Kaji
Affiliate Assist. Prof. Youngwoo Kim

Our laboratory conducts research on methods to ensure hardware safety, which is the bedrock of system information security. We also research to ensure system-level security, including the upper layers. In addition to students from information science fields, we also accept students who majored in electrical and mechanical engineering that wish to study the information field.

Hardware security, cryptographic hardware, embedded systems, side-channel analysis, electromagnetic information security, hardware Trojans, cyber-physical system security, sensor security, electromagnetic compatibility

Internet Architecture and Systems

Prof. Kazutoshi Fujikawa
Assoc. Prof. Ismail Arai
Assist. Prof. Masatoshi Kakiuchi
Assist. Prof. Arata Endo
Affiliate Assoc. Prof. Shigeru Kashihara
Affiliate Assoc. Prof. Akira Yutani

Our research goal is to realize the next-generation ICT infrastructure technologies and services beyond current systems such as the Internet, Wi-Fi networks, and cloud systems, which can be used securely and conveniently. In order to achieve this, our research methods are not only computer simulations but also using actual systems and equipment operated in Information Initiative Center (ITC).

Big data analysis, computer/network operation technique, disaster relief computing/networking, HPC cluster cyber security, pervasive computing, ubiquitous computing, Internet of Things, data centers, network operation, cyber security, high-performance computing, software-defined networking

Media Informatics Laboratories

Natural Language Processing

Prof. Taro Watanabe
Assoc. Prof. Hidetaka Kamigaito
Assist. Prof. Hiroki Ouchi
Affiliate Assist. Prof. Shohei Higashiyama
Affiliate Assist. Prof. Hiroki Teranishi
Affiliate Assist. Prof. Yusuke Oda

We perform research on natural language processing, computational linguistics and machine learning. Our primary focuses are on the fundamental techniques for language analysis, language generation and information extraction, and on the end applications, such as machine translation, summarization, question answering and grammatical error correction. We also work on language technologies that intersect with other areas, e.g., geography and vision.

Natural language processing, computational linguistics, machine learning, syntactic analysis, semantic analysis, information extraction, language generation, language grounding, machine translation, summarization, geography and language, vision and language

Media Informatics Laboratories

Social Computing

Prof. Eiji Aramaki
Assoc. Prof. Shoko Wakamiya
Assist. Prof. Shuntaro Yada
Affiliate Assist. Prof. Wan Jou She

We are an interdisciplinary laboratory specializing in the usage of social media mining and natural language processing (NLP) technologies towards a wide spectrum of social outcomes, ranging from medical informatics and mental health applications, to fake news detection on Twitter and AI-powered conversation.

Social computing, web engineering, artificial intelligence, machine learning, natural language processing, medical informatics, computational social science

Network Systems

Prof. Minoru Okada
Assoc. Prof. Takeshi Higashino
Assoc. Prof. Chen Na

The scope of our laboratory includes wireless technologies such as beyond 5G mobile communication systems, wireless power transfer systems, and radio sensors. We educate our students from theoretical and practical perspectives of wireless technologies to achieve our research goals.

Wireless communications, wireless power transfer, digital broadcasting, satellite communications, wireless sensors, multiple input multiple output, radio over fiber, dynamic charging, intelligent reflection surfaces, electromagnetic theory, modulation and signal detection

Interactive Media Design

Prof. Hirokazu Kato
Assoc. Prof. Masayuki Kanbara
Assist. Prof. Yuichiro Fujimoto
Assist. Prof. Taishi Sawabe

Our vision is to introduce augmented reality, interactive robots, and comfortable self-driving cars into the everyday lives of everyone on this planet. We aim to develop truly practical methods and systems using these technologies in cooperation with experts in various fields, focusing on medicine, sports, and industry.

Augmented reality, virtual reality, human computer interaction, human robot interaction, computer vision, computer graphics, training systems, support systems, user interfaces, self-driving cars

Optical Media Interface

Prof. Yasuhiro Mukaigawa
Assoc. Prof. Takuya Funatomi
Assist. Prof. Yuki Fujimura
Assist. Prof. Kazuya Kitano
Affiliate Assist. Prof. Takahiro Kushida

The research topics in our laboratory include computer vision to understand scenes from visual information obtained by a camera, and computer graphics to generate rich visual information for humans. We are aiming to realize new interfaces that enable humans and machines to interact through optical media based on our cutting-edge research.

Computer vision, computer graphics, computational photography, development of sensing systems, deep learning, optical measurement, unconventional cameras, image analysis, 3D shape reconstruction, digital fabrication

Cybernetics and Reality Engineering

Prof. Kiyoshi Kiyokawa
Assoc. Prof. Hideaki Uchiyama
Affiliate Assoc. Prof. Nobuchika Sakata
Affiliate Assoc. Prof. Naoya Isoyama
Assist. Prof. Monica Perusquía-Hernández
Assist. Prof. Yutaro Hirao

We conduct research to create the "tools of the future" to realize an inclusive society where all people can maximize their abilities and help each other. In particular, by manipulating various sensations such as vision, we aim to live more conveniently, more comfortably, or more securely by offering "personalized realities" which empathize with each individual.

Virtual and augmented reality, human augmentation, wearable computing, affective computing, cognitive science, psychology, computer vision, human and environmental sensing, artificial intelligence, display hardware

Human-AI Interaction

Prof. Sakriani Sakti

We conduct research to enhance communication and collaboration between humans and artificial intelligence. This includes exploring speech, text, and image interactions, as well as the interplay between language and paralanguage. Using cutting-edge AI technologies like deep learning, our aim is to achieve successful synergy between humans and machines for a future of collaborative intelligence.

Human-machine interaction, spoken language processing, zero-resource speech technology, computer vision, deep learning

Applied Informatics Laboratories

Human Robotics

Prof. Takahiro Wada
Assist. Prof. Yasuaki Orita
Assist. Prof. Hailong Liu

We conduct research studies on the intellectualization of robots, understanding human perception-action loops based on information science, and human machine system/human robot collaboration by combining them. We are aiming to define the quality of operational feeling and motion comfort in intelligent mechanical systems that interact with humans. Research questions include "What determines easiness of walking with an artificial leg?"

Human robot collaboration, robotics, human machine systems, human modelling, human machine interaction, cooperative control, biological cybernetics, motion perception, motion sickness

Robot Learning

Prof. Takamitsu Matsubara
Assoc. Prof. Kazuki Shibata
Affiliate Assoc. Prof. Kenta Hanada
Assist. Prof. Yoshihisa Tsurumine
Assist. Prof. Hikaru Sasaki
Assist. Prof. Yuhwan Kwon
Assist. Prof. Cheng-Yu Kuo
Assist. Prof. Yuki Kadokawa
Affiliate Assist. Prof. Hirotaka Tahara

Our laboratory performs research and educates students in robot learning (machine learning for robot intelligence), an interdisciplinary field of various fields such as machine learning, artificial intelligence, robotics, control engineering, signal processing, optimization and mechatronics.

Reinforcement learning, imitation learning, deep learning, active perception, smart manufacturing, human-assistive technology (exoskeleton robots, EMG interface), industrial applications, vehicle autopiloting

Large-Scale Systems Management

Prof. Shoji Kasahara
Assoc. Prof. Takanori Hara
Assist. Prof. Yu Nakahata

The Large-Scale Systems Management Laboratory research aims to develop mathematical modeling and simulation techniques for optimal design, control and architecture of large-scale systems such as computer/communication networks, with which the resulting systems achieve high performance, low vulnerability and high energy efficiency.

Queueing theory, game theory, machine learning, algorithms, graph theory, mathematical analytics, network optimization, blockchain, incentive mechanism design, data structure

Applied Informatics Laboratories

Mathematical Informatics

Prof. Kazushi Ikeda
Assoc. Prof. Takatomi Kubo
Assist. Prof. Chie Hieida
Assist. Prof. Yuzhe Li
Assist. Prof. Renzo Roel Perez Tan
Affiliate Prof. Junichiro Yoshimoto
Affiliate Prof. Toshitaka Yamakawa
Affiliate Assoc. Prof. Tomoya Tamei

Our laboratory studies mathematical models in various fields such as computer science, mathematical biology, and engineering. Computer science includes machine learning and statistical science. Mathematical biology includes neuroscience, medical science, cognitive science, psychophysics and bioinformatics/multiomics. Engineering includes biomedical engineering, signal processing, computer vision and robotics. Mathematical models are everywhere!

Mathematical models, machine learning, computational neuroscience, cognitive science, biomedical signal processing

Computational Systems Biology

Prof. Shigehiko Kanaya
Affiliate Prof. Hidehiro Iida
Assoc. Prof. MD. Altaf-Ul-Amin
Assoc. Prof. Naoaki Ono
Affiliate Assoc. Prof. Tetsuo Sato
Affiliate Assoc. Prof. Ming Huang

We are incorporating state-of-the-art data modeling/manipulating techniques such as deep learning techniques to better our understanding of the system biology of plants. In collaboration with medical hospitals and other academic institutions, we are developing various biomedical technologies based on information technology and deep learning techniques.

System biology, metabolic pathways, drug discovery, digital biomarkers, medical image processing, deep learning, computer aided diagnosis, proactive healthcare

Computational Behavioral Neuroscience

Assoc. Prof. Saori Tanaka
Affiliate Assist. Prof. Hiroyoshi Ogishima

To understand humans, we build behavioral models based on the information processing mechanism of the brain, investigate the principles of human behavior through verification using experimental and data-driven approaches, and conduct educational research on its application to society.

Computational neuroscience, behavioral modeling, neuroimaging, computational psychiatry, reinforcement learning

Collaborative Laboratories

Communication

Adjunct Prof. Tomoharu Iwata
Adjunct Assoc. Prof. Yusuke Tanaka

Our laboratory performs research on machine learning and data mining methods that extract valuable knowledge from various types of data. In particular, we are interested in developing methods that can learn from incomplete data, such as a small amount of data, data with many missing values, aggregated data, and noisy data.

Machine learning, data mining, deep learning, meta-learning, social network analysis, learning from aggregated data, spatio-temporal analysis

Computational Neuroscience

Adjunct Prof. Motoaki Kawanabe
Adjunct Assoc. Prof. Norikazu Sugimoto

We aim to understand the human brain and to achieve new machine intelligence (artificial intelligence) based on brain information processing functions. We conduct research and educate students on computational neuroscience, cutting-edge machine intelligence and neurotechnology at ATR, an internationally recognized computational neuroscience center.

Computational neuroscience, machine intelligence, robot learning, brain machine interface, cognitive function, neurofeedback, computational psychiatry, statistical modeling, multi-modal brain imaging, brain decoding

Humanware Engineering

Adjunct Prof. Masashi Okada
Adjunct Assoc. Prof. Yohei Nakata

Our laboratory performs research on Humanware, which essentially extends the abilities of humans and supports better human life by the combination of sensor data and knowledge processing. We explore new research areas such as smart houses and robotics combined with human, social, and physical sciences.

Humanware, artificial intelligence, deep learning, edge AI, explainable AI, scalable AI, uncertainty in AI

Symbiotic Systems

Adjunct Prof. Rui Ishiyama
Adjunct Assoc. Prof. Eiki Ishidera

We design solutions that utilize image sensing and recognition technology to solve technical issues that contribute to solving real social issues. We study knowledge acquisition technology for artifact metrics and object authentication, and conduct research and education from prototypes to practical applications.

Image recognition, artifact metrics, object recognition, laser speckle, knowledge acquisition, data collection, user interface, fine sensing, visualization

Optical and Vision Sensing

Adjunct Prof. Masaki Suwa

Our laboratory performs research and educates students from both theoretical and practical perspectives, ranging from fundamental research to engineering. Our research results are applicable especially in the field of factory automation, healthcare, and social systems.

Physics-based vision, vision-based 3D measurement, sensor calibration, object detection/recognition, machine vision algorithms

Information Science

Collaborative Laboratories

Molecular Bioinformatics

Adjunct Assoc. Prof. Kentaro Kawata
Adjunct Prof. Kentaro Tomii

We are developing bioinformatics methods and tools to explore the functions and mechanisms of biomolecules such as proteins. We aim to discover knowledge in the field of lifescience using information engineering techniques and to provide analysis methods that compensate for information deficiencies in experimental data.

Computational molecular biology, bioinformatics, omics, structural bioinformatics, genomics, data science, databases

Digital Human

Adjunct Prof. Mitsunori Tada
Adjunct Prof. Yukiyasu Domae
Adjunct Prof. Akihiko Murai

Our laboratory researches both humans and robots for realizing inclusive systems where they can collaborate and co-evolve. Our research includes theoretical studies on human behavior and robot control, and empirical studies on practical social systems such as manufacturing factories and small stores where humans and robots co-exist.

Digital humans, robots, digital twins, motion analysis, motion synthesis, computer vision, pattern recognition, material handling, human-robot collaboration, human-robot co-evolution

Formal Verification

Adjunct Prof. Reynald Affeldt
Adjunct Assoc. Prof. Yusuke Kawamoto

Formal verification methods are mathematically rigorous techniques for checking the correct behavior of computer systems. We study the formal verification of software systems dealing with uncertainties, e.g., to guarantee the safety of cyber-physical systems and to rigorously verify and explain statistical programs and artificial intelligence.

Programming languages, formal verification, logic, type theory, proof assistants, Coq, algebra, analysis, probability, statistics

High Reliability Software System Verification

Adjunct Prof. Naoki Ishihama

Our laboratory is focused on research into software verification methodologies to achieve high reliability and safety in software that must function properly under extreme environmental conditions. The research outcome will be expected to apply to practical use for systems that require high reliability not only in space systems but also in social core infrastructures.

Highly reliable software systems, safety systems, verification methodology, safety assurance methodologies, reliability

Multilingual Knowledge Computing

Adjunct Prof. Tomoya Iwakura
Adjunct Assoc. Prof. Yuchang Cheng

Our laboratory belongs to Fujitsu Limited. Artificial Intelligence (AI) today uses vast amounts of data to make decisions. We are researching and developing such AI technologies including knowledge computing and its application that makes use of knowledge extracted from multilingual text with natural language processing. One of our principal objectives is to take AI to new levels and create new value for society and we are aiming to realize AI that will support greater business growth and efficiency for our customers.

Artificial Intelligence (AI), natural language processing, knowledge computing, knowledge graphs

Intelligent Robot Dialogue

Adjunct Prof. Koichiro Yoshino
Adjunct Assist. Prof. Seiya Kawano

We research dialogue functions and intelligent systems for communication robots, roughly divided into three categories: understanding, control, and generation. To realize dialogue robots working in the real world, multimodal situation understanding (grounding) using language, speech, and images is necessary. The generative system of the robot utilizes multimodal expressions such as text, speech, images, and robot movements. We also study dialogue control mechanisms: reasoning, decision making, and inference on the knowledge base.

Dialogue systems, dialogue robots, natural language processing, language understanding, multimodal processing, knowledge acquisition, inference, dialogue management, language generation, reinforcement learning

Multimodal Environment Recognition

Adjunct Prof. Yasutomo Kawanishi
Adjunct Assist. Prof. Motoharu Sonogashira

We promote research on computer vision and pattern recognition using sensors that observe the robot's surrounding environment. In particular, we focus on understanding the 3D environment, recognizing and tracking objects, understanding the details of people around the robot, and integration of multiple modalities.

Computer vision, pattern recognition, robot vision, surveillance, environment recognition, object recognition, person recognition, activity understanding, multimodal integration

Multilingual Natural Language Processing

Affiliate Prof. Eiichiro Sumita
Affiliate Assoc. Prof. Chen Chen Ding

Multilingual natural language processing is an important technology that is essential for domestic and international information distribution.This laboratory conducts research on systematic methods that can be applied to any language by clarifying language independence and language dependence for multiple languages, and conducts education and research on scalable algorithms that make full use of large-scale computational resources targeting various language data. The site of "Min'na no Jidou Hon'yaku @ TexTra" developed by the National Institute of Information and Communications Technology will be used for outreach activities.

Natural Language Processing, Multilingual Information Processing, Computational Linguistics, Machine Translation, Large-Scale Computing, Multimodal Information Processing

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Biological Science

Plant Biology Laboratories

Plant Developmental Signaling

Prof. Keiji Nakajima
Assist. Prof. Tatsuaki Goh

We study molecular and genetic mechanisms of plant development and growth control in response to environmental factors using Arabidopsis and liverworts as model systems. We develop unique microscopic systems and image processing techniques to analyze dynamic changes in the growth and functions of plant organs.

Plant development, enviromental response, roots, sexual reproduction, evolution, Arabidopsis, liverwort, live imaging, computer vision

Plant Metabolic Regulation

Prof. Taku Demura
Assist. Prof. Tadashi Kunieda
Assist. Prof. Miya Mizutani

Research and education on regulatory mechanisms of plant cell differentiation, cell wall, and molecule transport, mechanisms to control plant function, metabolism, and dynamics, and the creation of useful GM plants and trees such as light emitting trees, in order to solve environmental and energy problems and contribute to industry, through the utilization of woody biomass.

Woody biomass, plant cell wall, molecular breeding, mechanical property of plant, regulation of molecule transport

Plant Growth Regulation

Prof. Masaaki Umeda
Assist. Prof. Shiori Aki
Assist. Prof. Zhang Ye

Our laboratory studies the mechanisms of DNA polyploidization, stress response and genome maintenance that support sustained plant growth under changing environments. We will contribute to the development of technologies that increase plant biomass and food production, thereby solving global environmental issues.

Plant organ growth, cell cycle, DNA polyploidization, biomass, environmental stress, DNA damage response, genome maintenance, phytohormone, signal transduction, chromatin structure, epigenetics

Plant Stem Cell Regulation and Floral Patterning

Prof. Toshiro Ito
Assoc. Prof. Nobutoshi Yamaguchi
Assist. Prof. Makoto Shirakawa
Assist. Prof. Yuko Wada

We are interested in a holistic view of gene regulation in plant reproduction, which leads to developmental robustness and coordination. We explore signaling and epigenetic control in stem cell maintenance, environmental response and fertilization. Our students work at the frontiers of plant molecular genetics, developing their research, presentation and writing skills.

Flower development, transcription factors, epigenetics, histone modification, hormone signaling, transcriptomes, epigenomes, molecular breeding, chemical biology, synthetic biology

Plant Physiology

Prof. Motomu Endo
Assist. Prof. Akane Kubota-Namima
Assist. Prof. Nozomu Takahashi

Focusing on the circadian clock and photoperiodism, our laboratory conducts theoretical and experimental research and education on how, when and where plants perceive time and seasons, and how they use this information to control their responses.

Circadian clock, photoperiodism, flowering, inter-organ/tissue/cellular communication, circadian rhythm, chronobiology, Arabidopsis, plants, plant physiology

Plant Immunity

Prof. Yusuke Saijo
Assist. Prof. Shigetaka Yasuda

Our laboratory performs research in the areas of plant-microbe interactions, with a focus on immune receptor signaling, signal integration between biotic and abiotic cues, plant-inhabiting microbes and microbiomes. We wish to elucidate the underlying molecular principles in model plants and crops, and apply the obtained knowledge to promoting sustainable agriculture.

Plant immunity, plant-microbe interactions, pattern recognition receptors, damage sensing, microbiomes, symbiosis, plant pathology, abiotic stress, environments

Plant Symbiosis

Prof. Satoko Yoshida
Assist. Prof. Mina Ohtsu
Assist. Prof. Shoko Inaba

Our laboratory focuses on research of parasitic plants, especially Orobanchaceae parasitic plants that cause severe agricultural damage in Africa. We use molecular biology, genetics, microscopy, and bioinformatic techniques to elucidate the mechanisms of plant parasitism. We also work on the other plant-organism relationships, including plant-nematode interaction, hervivory by the golden apple snail on rice, and plant and arbuscular mycorrhizal fungi interaction.

Parasitic plants, Striga, haustorium formation, molecular genetics, microscopy, transcriptome, genome analysis, evolution, chemical biology

Plant Secondary Metabolism

Prof. Takayuki Tohge
Assist. Prof. Shinichiro Komaki

Our laboratory focuses on the study of chemical diversity and metabolic polymorphism of plant secondary (specialized) metabolism by translational analysis of genomics, transcriptomics and mass spectrometry-based metabolomics, as well as functional annotation of key genes corresponding to the production of active phytoprotectants moderating environmental stress in plants.

Plant metabolism, chemical diversity, metabolic polymorphism, environmental adaptation, integrative omics approaches, comparative omics, cross-species comparison, genomic synteny, metabolic engineering, model plant to crop

Plant Regeneration and Morphogenesis

Assoc. Prof. Momoko Ikeuchi

Why can plants readily regenerate their bodies upon injury? We pursue the secrets of plants' regenerative capacity using molecular genetics, live imaging and single cell transcriptome analyses. Uncovering the secrets of plants' regenerative capacity will potentially benefit human life by improving various aspects of agricultural biotechnology including grafting and tissue culture.

Regeneration, cellular pluripotency, developmental plasticity, tissue cultures, grafting, imaging, transcriptomes, epigenetics, Arabidopsis thaliana

Biological Science

Biological Science

Biomedical Science Laboratories

Functional Genomics and Medicine	All the faculty members in our laboratory, Ishida, Oka, and Matsuda, were educated and trained in medical schools. Therefore, as we focus on human diseases, we investigate the molecular mechanisms involved in their development and novel therapeutic strategies to treat them.
Assoc. Prof. Yasumasa Ishida Assist. Prof. Chio Oka Assist. Prof. Eishou Matsuda	PD-1, self-nonself discrimination, cancer immunotherapy, HtrA1, age-related macular degeneration, CIBZ, methylated DNA-binding proteins
Molecular Immunobiology	The innate immune system is the first line of host defense that detects invading pathogens. However, aberrant activation of innate immune responses is closely associated with exacerbation of inflammatory diseases. Our aim is to uncover mechanisms that control innate immune responses using tools of molecular and cell biology, bioinformatics and genetically modified mice.
Prof. Taro Kawai Assist. Prof. Daisuke Ori	Innate immunity, inflammation, vaccines, adjuvant, autoimmunity, macrophages, dendritic cells, cell death, cancer, gene targeting
Molecular Medicine and Cell Biology	Each type of cell has a specific shape that is determined by the plasma membrane. Our lab will focus on the mechanisms connecting the membrane to the cytoskeleton for varieties of cellular functions including migration, proliferation, extracellular vesicles, and various events associated with morphological changes, in various disease conditions. We will integrate cell biology, molecular biology, biochemistry, biophysics, and machine learning.
Prof. Shiro Suetsugu Assoc. Prof. Tamako Nishimura Assist. Prof. Hiroki Kawana	Molecular cell biology, biochemistry, biophysics, data science, extracellular vesicles
RNA Molecular Medicine	Our laboratory studies biogenesis and functions of regulatory small non-coding RNAs and tries to understand how they contribute to human health. We conduct bioinformatics analysis to extract important information from large amounts of sequencing data and perform biochemical experiments using cultured cells and model organisms to test hypotheses.
Prof. Katsutomo Okamura Assist. Prof. Ren Shimamoto Assist. Prof. Masami Shiimori	MicroRNA, regulation of miRNA processing, transcriptomes, siRNA, Argonaute, RNA-dependent RNA polymerase
Stem Cell Technologies	Our goal is to understand the mechanisms of tissue development from the viewpoint of stem cell differentiation. We are also interested in the tissue regeneration process because the tissue stem cells are activated and initiate differentiation upon damage.
Prof. Akira Kurisaki Assist. Prof. Hitomi Takada Assist. Prof. Atsushi Intoh	Stem cells, differentiation, 3D culture, organoids, development and regeneration
Developmental Biomedical Science	Our laboratory is interested in the molecular mechanisms of development of the vertebrate central nervous system, and use chick, mouse embryos, and mouse stem cells as model systems. We also elucidate the mechanisms for the functional maintenance of mature neurons.
Assoc. Prof. Noriaki Sasai Assist. Prof. Takuma Shinozuka	Developmental biology, molecular biology, cell biology, central nervous systems, neurodegenerative disease, chicks, mice, embryonic stem cells
Organ Developmental Engineering	We are researching the formation of organs using interspecies chimeric animals in which mouse and rat cells coexist in one body. Through this research, we investigate the essential factors for organ development and the correct function of organs.
Assoc. Prof. Ayako Isotani Assist. Prof. Shunsuke Yuri	Interspecies chimera, organ formation, developmental engineering, regenerative medicine, genome editing

Systems Biology Laboratories

Microbial Interaction	Our research focuses on the behavior and interactions of microorganisms, especially yeast, which is a representative producer of fermented foods such as alcoholic beverages and bread. By understanding eukaryotic cellular systems and harnessing the power of microorganisms, we aim to contribute to delicious and healthy food technology.
Assoc. Prof. Daisuke Watanabe Assoc. Prof. Yukio Kimata Assist. Prof. Yuichi Morozumi Assist. Prof. Yukiko Nakase	Microbial ecology, microbial interaction, protein-protein interaction, signal transduction, TOR signaling, environmental response, ER stress response, food fermentation, yeast
Environmental Microbiology	We study the unique metabolic capabilities of microorganisms at the cellular and molecular levels. Furthermore, we aim to develop technologies that contribute to solving environmental problems and the realization of a sustainable society by utilizing microbial functions. A recent focus is poly(ethylene terephthalate) biodegradation.
Prof. Shosuke Yoshida Assist. Prof. Min Fey Chek	Microbiology, metabolic engineering, genomics, transcriptomics, enzymology, imaging, genetic engineering, microbial breeding, microbial evolution, microbial screening
Structural Life Science	In cells, various proteins are involved in a variety of fundamental biological phenomena. To unveil such mechanisms coupled with dynamic interactions and structural changes of biomolecules, including proteins, we conduct basic research through structural biologic analyses in combination with other newly developed methods.
Prof. Tomoya Tsukazaki Assist. Prof. Ryoji Miyazaki Assist. Prof. Ken Kitano	Protein science, structural life science, structural biology, protein structure, protein interaction, protein complexes, protein transport, molecular dynamics, molecular mechanisms, crystallography
Gene Regulation Research	We are clarifying the principles of animal development and growth using mice and zebrafish as model systems. We bring together various technologies, including genetics, molecular biology, bioimaging technology, pharmacology, bioinformatics, mathematical modeling, and nanotechnology to tackle the mystery of life.
Prof. Yasumasa Bessho Assoc. Prof. Takaaki Matsui Assist. Prof. Ryutaro Akiyama Assist. Prof. Norihiro Kitagawa Assist. Prof. Yasuko Inaba	Developmental biology, mice, zebrafish, live imaging, gene editing, body plans, transcription factors, biological clocks, collective behavior, regeneration
Bioengineering	In our laboratory, we are performing research and education on the development of basic technology for efficiently producing useful materials such as biopharmaceuticals in plants and the elucidation of the mechanisms controlling the phenotype of plants in order to contribute to society through biotechnology.
Prof. Ko Kato Assist. Prof. Shotaro Yamasaki Assist. Prof. Tomomi Wakabayashi Assist. Prof. Takehide Kato	Production of useful materials in plants, environmental response in plants, regulation of gene expression, bioinformatics, machine learning, adaptive evolution in plants
Data-driven Biology	Our laboratory analyzes experimental biological data to build quantitative mathematical models and provide feedback for experimental design. We work to preprocess the data using domain knowledge, and then use machine learning and mathematical models to extract novel knowledge.
Prof. Yuichi Sakumura Assist. Prof. Toshiya Kokaji	Cell migration, morphogenesis, tissue formation, trans-omics, disease diagnosis by exhaled breath, machine learning, quantitative modeling, mechanobiology, image analysis software development

Collaborative Laboratories

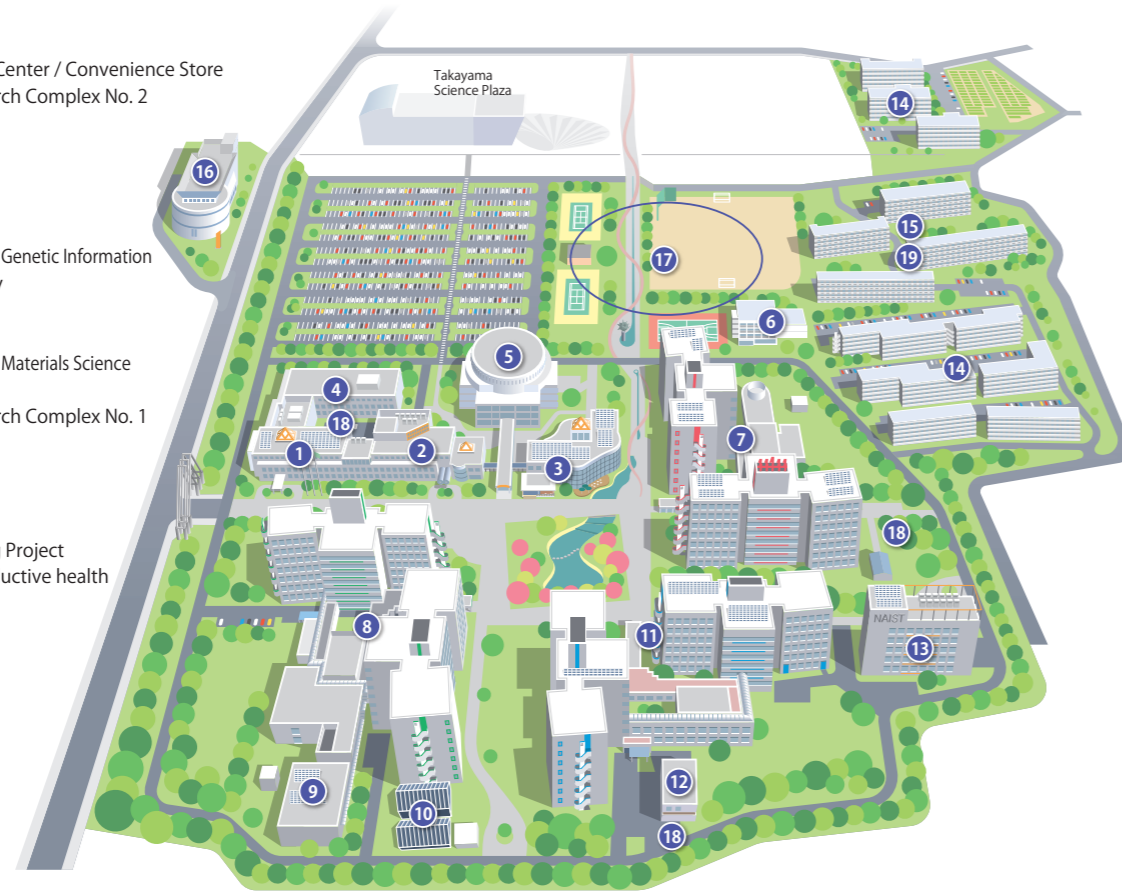| Molecular Microbiology and Genetics	Basic research and education activities focus on the development of a biorefinery, a facility that integrates biomass conversion and environment-friendly production of fuels and other useful chemicals. To achieve this, smart cell technologies combining bio- and digital biotechnologies, integrated omics analysis and metabolic conversion techniques are employed to develop new microbial functions.
Adjunct Prof. Masayuki Inui Adjunct Assoc. Prof. Takahisa Kogure	Smart cell technologies, applied microbiology, bio-production, high-efficiency bioprocesses, regulation of gene expression, systems biology, molecular biology, genome engineering, culture engineering, metabolomic analysis, metabolic engineering

Materials Science

Core Laboratories

Bio-Process Engineering	
Prof. Yoichiroh Hosokawa Assoc. Prof. Yalikun Yaxiaer Assist. Prof. Yuka Tsuri Assist. Prof. Naomi Tanga	Our laboratory promotes developmental research on high-precision and fast manipulation methodologies for biological materials, in which state-of-the-art laser technology is combined with microscope technologies. We have the world's top activities on cell manipulation and processing by femtosecond laser and have attracted attention as a pioneer of laser applications for biotechnology.
	Femtosecond lasers, atomic force microscopy, micro-fluidic devices, cell manipulation, cell processing, laser-induced shockwaves, bio-applications, cell sorters, fluorescence imaging, photoporation, laser-induced crystallization

Solid-state Information Physics	
Prof. Tomohiro Matsushita Assoc. Prof. Ken Hattori Assist. Prof. Sakura Takeda Assist. Prof. Yusuke Hashimoto Assist. Prof. Takanobu Jujo Assist. Prof. Yuta Yamamoto	Our aim is to clarify atomic structures, electronic states, and derived physical properties for dopants in solids, thin films and interfaces on solid surfaces, and in addition, precisely controlled three-dimensional shapes surfaces by using various equipment and analysis methods (including original development) for materials research and education.
	Atomic and electronic structures (dopants, thin films, surfaces, interfaces), three-dimensional shapes surfaces, photoelectron holography, electron diffraction, scanning tunneling microscopy, angle resolved photoelectron spectroscopy, electronic states, magnetism, luminescence, molecule adsorption and desorption, synchrotron radiation

Quantum Photo-Science	
Prof. Hiroyuki Katsuki Assist. Prof. (Joining in Apr. 2024)	We develop techniques to manipulate the quantum properties of strongly-coupled systems, such as vibrational polaritons and cavity exciton polaritons. We utilize ultrafast laser pulses and apply optics-based experimental approaches to clarify and manipulate material properties from the viewpoint of quantum physics.
	Coherent control, ultrafast spectroscopy, femtosecond laser, vibrational polariton, exciton polariton, two dimensional semiconductor, photo-induced phase transition, laser microscopy

Photonic Device Science	
Prof. Masakazu Nakamura Assoc. Prof. Kiyotaka Sasagawa Assist. Prof. Hironari Takehara	In our laboratory, we are conducting cross-disciplinary research, from the design of original optoelectronic devices based on microelectronics technology to their applications. Specifically, we are developing novel photonic devices and systems such as retinal prosthesis, implantable functional brain imaging devices, near-infrared color imaging, and visualization of high-frequency electric fields.
	Smart CMOS image sensors, implantable devices, retinal prosthesis, optogenetics, near-infrared imaging, lensless imaging, high frequency electric field imaging

Applied Quantum Physics	
Prof. Takayuki Yanagida Assoc. Prof. Noriaki Kawaguchi Assoc. Prof. Daisuke Nakauchi Assist. Prof. Takumi Kato	Our laboratory studies scintillators and storage phosphors for solid state ionizing radiation detectors, and the coverage is synthesis of materials (single crystal, transparent ceramic, glass, organic-inorganic perovskite, and powder), photophysics and radiation detector properties.
	Scintillators, scintillation detectors, dosimeters, thermally stimulated luminescence (TSL), optically stimulated luminescence (OSL), radiophotoluminescence (RPL), radiation detectors, phosphor, photoluminescence

Organic Electronics	
Prof. Masakazu Nakamura Assoc. Prof. Hiroaki Benten Assist. Prof. Manish Pandey	Our laboratory pursues the development of novel electronic devices using organic materials based on applied physics and chemistry. Our research is unique in that we develop original research tools to characterize organic thin films and low-dimensional materials, and realize entirely new fabrication methods and structures of devices which are distinctive from conventional ones.
	Organic electronics, energy harvesting, thermoelectric generators, solar cells, thin-film transistors, molecular orientation, Seebeck effect, thermal management, scanning probe microscopy, CNT, proteins, polymer semiconductors, hybrid perovskite

Photonic and Reactive Molecular Science	
Prof. Tsuyoshi Kawai Assoc. Prof. Tsumoru Morimoto Assist. Prof. Mihoko Yamada Assist. Prof. Marine Louis	Our group investigates light/matter interactions to tackle innovative chemistry, promoting social progress and protecting the environment. We aim to cultivate students by developing creative, critical minds to shape tomorrow's molecular technology. Our focus encompasses innovative molecules for remote-controlled photo-induced stereo/enantio-selective catalysis, conversion of light information as well as light-energy with molecular photo-response. For this, we conduct advanced scientific research on synthetic organic chemistry, molecular photochemistry, fluorescence and phosphorescent materials and chiral light emitting molecules. Furthermore, from the perspective of organic reaction chemistry, our goal is the realization of green chemistry on the basis of carbon neutrality.
	Photochromes, photo-triggered reactions, chirality, stereo/enantio-selective catalyses, circularly polarized luminescence, transition metal catalyst, future displays, light emitting devices, lanthanides, fluorine chemistry, carbon neutral, green chemistry, photopolymerization

Biomimetic and Technomimetic Molecular Science	
Prof. Gwenael Rapenne Assoc. Prof. Kazuma Yasuhara Assist. Prof. Toshio Nishino	We are designing and synthesizing molecules which can act as machines at the nanoscale, including motors, gears and nanocars. Thanks to the injection of energy (light or electron) these molecular machines can produce a controllable motion. We are also developing biologically-active molecules by mimicking natural molecular machines.
	Molecular machines, organic chemistry, coordination chemistry, gears, nanocars, bioactive molecules, polymer chemistry, artificial membranes, interface chemistry, amphiphiles

| Functional Organic Chemistry	
Prof. Naoki Aratani	We focus on the development of functional organic materials including organic semiconductors, highly fluorescent dyes, near-infrared (NIR) dyes, and carbon nanomaterials. In particular, we are fascinated by beautiful and huge organic structures with high symmetry.
	Functional organic materials, nano-carbon chemistry, organic photochemistry, emissive dyes, molecular design

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Materials Science

Core Laboratories

Functional Supramolecular Chemistry	
Prof. Shun Hirota Assoc. Prof. Takashi Matsuo Assist. Prof. Naoya Kobayashi Assist. Prof. Tsuyoshi Mashima	We are performing new interdisciplinary research in chemistry and biology. Based on the chemical knowledge of the functions and structures of biomolecules at molecular level, our laboratory focuses on the elucidation of protein mechanisms and design/application of bio-supramolecules using various analytical methods, protein engineering techniques, and organic syntheses.
	Supramolecules, proteins, nanobiotechnology, bioionorganic chemistry, protein science, biophyisical chemistry, biofunctional chemistry, organic synthesis, coordination chemistry, catalytic reactions, function control, enzymatic reactions, metalloprotein, chemical modification, genetic mutation, analytical methods, pharmacy, hemoglobin, antibodies, protein drugs, artificial enzymes, computer-based protein design

Complex Molecular Systems	
Prof. Hironari Kamikubo Assoc. Prof. Sachiko Toma-Fukai Assist. Prof. Yoichi Yamazaki Assist. Prof. Kento Yonezawa	Our laboratory focuses on the autonomous assembly-disassembly phenomena exhibited by complex molecular systems of proteins. Based on protein science and biophysics, we conduct research and education on the understanding of protein-molecule complex systems as potential targets for drug discovery and the development of next-generation protein-molecule complex materials.
	Protein science, biophysics, structural biology, protein design engineering, x-ray solution scattering, x-ray & neutron crystallography, spectroscopy, recombinant DNA technology, structural proteins, protein transport systems, signal transduction systems

Nanomaterials and Polymer Chemistry	
Prof. Hiroharu Ajiro Assoc. Prof. Tsuyoshi Ando Assist. Prof. Nalinthip Chanthaset Assist. Prof. Hiroaki Yoshida	Based on the concepts of "molecular technology" and "precise polymerization", we prepare various polymer structures and create new polymer materials by controlling molecular design, polymer synthesis and polymer-polymer interactions. The target of their application is biocompatible materials, energy related materials, and environmentally friendly materials.
	Biomaterial, degradable polymers, environmentally friendly material, energy related material, polymer synthesis, molecular design, nano structure, stimuli responsive property, gels, films

Materials Informatics	
Prof. Mikiya Fujii Assoc. Prof. Tomoaki Takayama Assist. Prof. Yosuke Harashima Assist. Prof. Shogo Takasuga	In our laboratory, we study materials informatics. Our goal is to develop informatics analysis methods and their applications to improve material properties. In material science, experiments and theories have developed by interacting with each other. We are particularly interested in the technology that integrates and utilizes them.
	Materials informatics, machine learning, conditional generative adversarial networks, data assimilation, computational quantum chemistry, first-principles calculation, photocatalysts

Metrology Informatics	
Prof. Shigetaka Tomiya Assoc. Prof. Zentaro Akase	We leverage data science to advance material analysis and metrology techniques essential for creating cutting-edge semiconductor materials and devices. Utilizing these innovative technologies, we aim to address technical challenges and uncover fundamental principles critical to the realization of advanced materials and devices.
	Metrology informatics, materials analysis, data science, electron microscopy, semiconductor materials and devices

Core Laboratories (Cooperative)

Data Driven Chemistry	
Assoc. Prof. Tomoyuki Miyao Assist. Prof. Jasial Swarit	Chemoinformatics is a research area where chemical problems are tackled using tools coming from informatics. Our primary mission is to develop useful data analysis methodologies for experimental chemists/ biologists by incorporating theory and data. The methods developed by our group have a wide range of applications from drug discovery to process control in chemical plants.
	Chemoinformatics, data-driven chemistry, virtual screening, soft sensors, chemical plant operation, drug discovery, in-silico modeling, machine learning, data analysis, process informatics

Core Laboratories (Collaborative)

Functional Polymer Science	
Adjunct Prof. Komei Okabe Adjunct Assoc. Prof. Kazuhiro Kudo	Our laboratory focuses on material discovery and formulation design for ocular drug delivery in the treatment of ocular diseases. We explore the innovative DDS platform to efficiently penetrate target ocular tissues and educate students by synthesizing, analyzing, and evaluating novel materials, such as functional polymers and cell-penetrating peptides.
	Drug delivery systems (DDS), ophthalmology, formulation design, chemical synthesis, functional polymers, cell penetrating peptides

Ecomaterial Science	
Adjunct Prof. Katsunori Yogo Adjunct Prof. Junichiro Kugai Adjunct Assoc. Prof. Tomohiro Kinoshita	The Ecomaterial Science Laboratory, staffed by researchers of the Research Institute of Innovative Technology for the Earth (RITE), provides research and education on fundamental technologies to solve global warming issues. We endeavor to develop advanced materials for CO2 capture and H2 energy production, such as zeolite and amine-based materials.
	Global warming, CO2 capture, CCUS, zeolites, amine-based materials, mesoporous materials, polymeric materials, metal organic frameworks (MOF), inorganic membranes

Advanced Functional Materials	
Adjunct Prof. Masanari Takahashi Adjunct Prof. Joji Kadota Adjunct Assoc. Prof. Mari Yamamoto	Based on material creation and morphology control technologies, we focus on key issues facing next-generation industries. To develop innovative secondary battery materials that will be the key to realize next-generation energy devices, we are developing battery materials, solid-solid interface control technology, and sheet cells. In addition, to develop new biodegradable materials adapted to the global environment, we will develop alternative materials to plastics through precision polymerization of polylactic acid using our unique organic catalysts and primary structure control.
	All solid-state lithium-ion secondary batteries, high energy density, interface control, biodegradable polymers, accurate polymerization, polylactic acid

Campus Map & Facilities

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
⑰ Sports facilities
⑱ Keihanna NAISMoN Car-sharing Project
⑲ Rooms for childcare and reproductive health

Takayama
Science Plaza

Around Campus

— 🚶 20 min. on foot
— 🚌 8 min. by bus

Science Plaza
To Kyoto Sta

Nara Institute of
Science and Technology

7-ELEVEN
Gakken-Nara-Tomigaoka Sta
Gakken-Kita-Ikoma Sta
Kintetsu Keihanna Line
Starbucks Coffee
Kitayamato Post Office
Royal Home Center &
Nitori Furniture
Aeon Shopping Mall
Okuwa Supermarket
Nanto Bank
Uniqlo
Gyomu Super
Takanohara Sta
Kintetsu Kyoto Line

N

Yaohiko Supermarket
Aeon Shopping Mall
Takanohara Central Hospital

Ikoma Sta
Gakuemmae Sta
Kintetsu Nara Line
Yamato-Saidaiji Sta
To Kintetsu
Nara Sta

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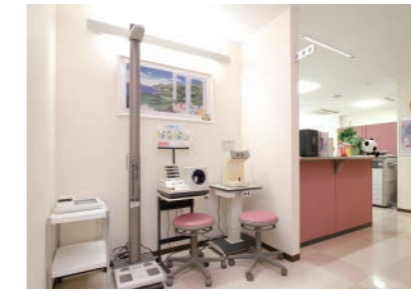
Health Care Center ❸
The Health Care Center staff includes a doctor, nurses and counselors, and they offer medical examinations and assistance, health guidance and mental health counseling for students, faculty and staff.

Guesthouse Sentan ❻
The guesthouse offers reasonable short-term on-campus accommodations for visiting students, researchers, etc. to facilitate collaboration with both international and domestic partners.

Sports facilities ⑰
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.

Keihanna NAISMoN Car-sharing Project ⑱
As part of research being performed at NAIST, a car-share system called NAISMoN featuring electric vehicles was established. With 6 charging stations on campus and one ATR premises in Keihanna area along with an auction-based system, the project is thought to create a sustainable society within NAIST and Keihanna area communities.
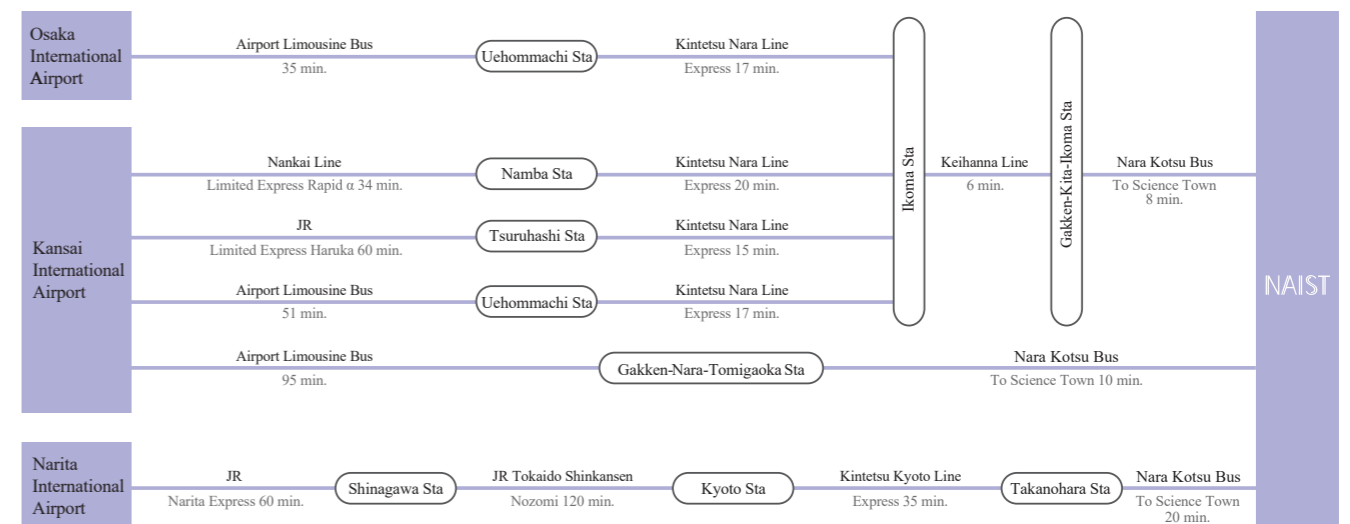
Rooms for childcare and reproductive health ⑲
These rooms have been established along with various child and family care support programs as part of NAIST's efforts to support female faculty and employees' work-life balance.

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.		NAIST
	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.		

Nara Institute of Science and Technology
8916-5 Takayama-cho, Ikoma, Nara 630-0192 JAPAN

NAIST Website

**Division of
Information Science**

**Division of
Biological Science**

**Division of
Materials Science**

Contact information

For inquiries concerning:

Graduate Studies for International Students

International Student Affairs Section, International Affairs Division
Email: ryugaku@ad.naist.jp   Phone: 0743-72-5909

International Partnerships, International Researchers and Scholars

International Affairs Section, International Affairs Division
Email: kokusai@ad.naist.jp   Phone: 0743-72-6245