to the world

NAIST.

NARA INSTITUTE of SCIENCE and TECHNOLOGY

Outgrow your limits

World-class research and education
at the forefront of science and technology

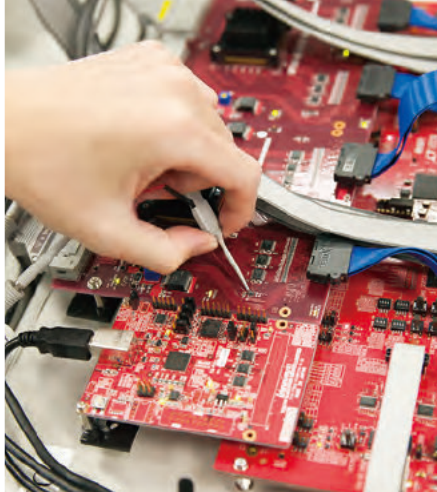from Nara, Japan.

सिल्क रोड เส้นทางสายไหม Silk Road 丝绸之路 실크로드 しるくろーど جاده ابریشم

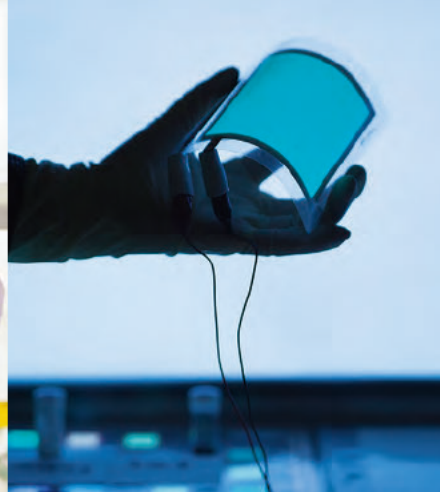Institute of Science and Technology
Nara
NAIST ®

A Japanese national university composed solely of graduate schools

Information Science | **Biological Sciences** | **Materials Science**

About NAIST

NAIST was founded in 1991 as a Japanese national university consisting solely of graduate schools in three integrated areas: information science, biological sciences, and materials science. At present, about 1,000 students—19% from overseas—are supervised by roughly 200 NAIST faculty.

With its cutting-edge facilities and a 5 to 1 student-to-faculty ratio, NAIST's world-leading education and research are a direct result of its rich, global environment and supportive infrastructure. Moreover, the outstanding achievements of NAIST's faculty and students are shared world-wide through patents, licenses, spin-off companies, and active exchange with overseas partners.

As a result, NAIST has quickly established itself as a world-class education and research center where young scientists and technologists become tomorrow's global leaders.
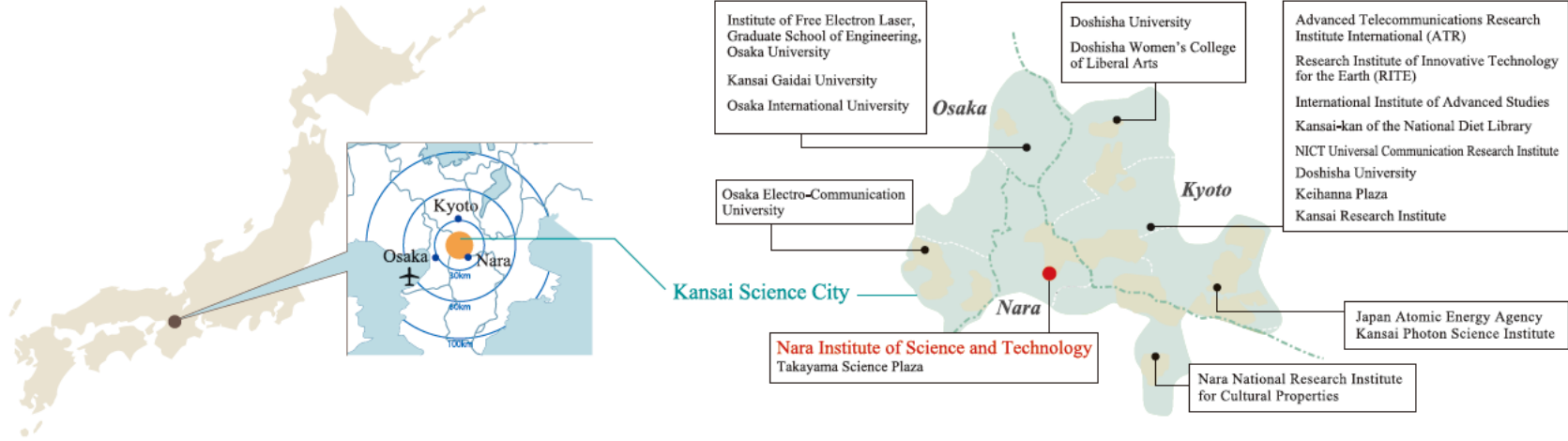
Location

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 90 minutes from Kansai International Airport.

Kansai Science City

NAIST is located in the area called "Kansai Science City" (also known as "Keihanna") a national science project constructed in the Kansai Hills area, extending into three prefectures: Kyoto, Osaka, and Nara. The aim of Kansai Science City is to establish a new base for creative, international, interdisciplinary and inter-industrial academic research through the close cooperation of industrial, governmental, and academic organizations. More than 110 prestigious companies and institutions, including Kyocera, Panasonic, Advanced Telecommunications Research Institute International (ATR), the National Institute of Information and Communications Technology (NICT), and the Research Institute of Innovative Technology for Earth (RITE) now operate in Kansai Science City and have made great contributions to science and technology.

Concept: Education through Research

NAIST tackles problems at the frontiers of science in an environment of interdisciplinary and international cooperation. Students and researchers have access to world-class facilities in a stimulating environment that promotes individual research achievements, collaboration across traditional research fields, and flexible course curricula.

- Research-focused Environment: NAIST was established without undergraduate departments to allow the faculty to commit themselves towards achieving superior research results.

- Research-based Education: Through the research of our accomplished faculty and collaboration with industry and academic partner institutions, NAIST's students learn both in traditional settings and through hands-on experiences at the forefront of science and technology.

Admission Policy

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

Flexible Student Acceptance

- NAIST accepts students from various fields who are enthusiastic to learn and conduct research, and researchers / engineers who are active contributors to society.
- Entrance Examinations held 3 times a year
- April and October enrollment
- No comprehensive written exam, but rather a general assessment based on interviews, survey reports, etc.
- Curriculum created to suit students from diverse fields (basic and introductory courses, wide-ranging lectures, seminars, problem-based research, etc.)
- Flexible curriculum management (multiple faculty member guidance, exchange of credits from other universities, research guidance counselors, semester system)

International Student Enrollment - 194 students

As of October 2014

Asia:

Country		Country	
China	37	Korea	3
Indonesia	26	Bangladesh	2
Malaysia	24	Taiwan	2
Thailand	21	Pakistan	2
Philippines	15	Laos	2
Vietnam	14	Mongolia	1
India	3	Sri Lanka	1

Europe:

Country	
Germany	4
Spain	3
Finland	2
Sweden	1
Macedonia	1
Russia	1
Switzerland	1
Serbia	1
Belgium	1
Bosnia-Herzegovina	1
Portugal	1
Romania	1

S. America:

Country	
Brazil	2
Ecuador	1
Costa Rica	1
Paraguay	1
Mexico	1

N. America:

Country	
United States	2
Canada	1

Africa:

Country	
Côte d'Ivoire	3
Egypt	1
Kenya	1
Senegal	1
Tanzania	1
Nigeria	1

Oceania:

Country	
Australia	2
New Zealand	2

Middle East:

Country	
Saudi Arabia	1
Turkey	1

Examination and Enrollment Fees / Tuition

	Examination	Enrollment	Tuition
Master's and Doctoral Program Students	¥30,000	¥282,000	¥267,900/semester
Research Student	¥9,800	¥84,600	¥29,700/month
Special Research Student (Short-term Exchange Student)	–	–	¥29,700/month

(as of October 2014)

Financial Support

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

MEXT offers full scholarships to excellent overseas students and researchers to continue their studies in Japan.

NAIST and Private Scholarships, etc.

There are numerous scholarships and grants offered exclusively to international students by NAIST and other public and private institutions.

Admission and Tuition Fee Exemption

International students who are unable to pay enrollment fees or tuition due to financial difficulty may apply for full or partial exemption. (MEXT scholarship students are exempt from both fees.)
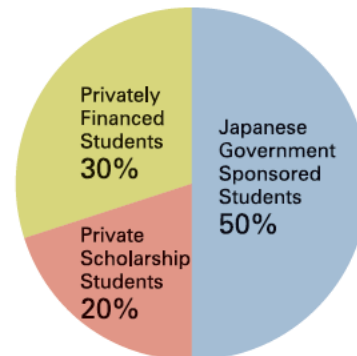
Teaching / Research Assistantships

NAIST actively supports students through teaching and research assistantships where they also gain valuable experience in education and research.

Privately Financed Students 30%

Japanese Government Sponsored Students 50%

Private Scholarship Students 20%

International Student Financial Aid
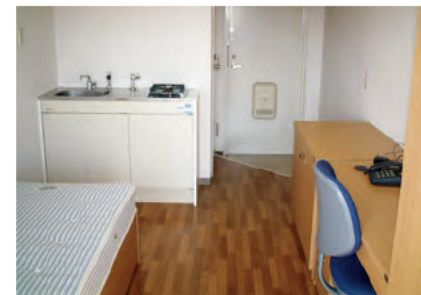
(as of October 2014)

Dormitories

Affordable On-campus Housing

All international students are eligible for on-campus housing with internet access. Housing fees range from ¥10,000 - ¥15,000 /month for single, married, or family housing.

Information Science

The core focus of the Graduate School of Information Science is on communication between society, people and computers, as well as the computing infrastructure for the Big-data era that will support sustainable growth and societal development well into the future. Our world-class faculty, staff, and curriculum contribute to the cultivation of researchers and engineers who will be leaders in tomorrow's universally connected society.

Affiliate Laboratories

- Communication (NTT Communication Science Laboratories)
- Computational Neuroscience (ATR International)
- Network-Human Interaction
  (Panasonic Corporation, Advanced Technology Research Laboratories)
- Symbiotic Systems (NEC Corporation, C & C Innovation Initiative)
- Human Interface (Fujitsu Laboratories Ltd.)
- Multimedia Mobile Communication (NTT DOCOMO, Inc.)
- Optical and Vision Sensing (OMRON Corporation, Core Technology Center)
- Molecular Bioinformatics (National Institute of Advanced Industrial Science and Technology)
- Digital Human (National Institute of Advanced Industrial Science and Technology)
- Technology of Radiological Science (National Cerebral and Cardiovascular Center Research Institute)
- Secure Software System (National Institute of Advanced Industrial Science and Technology)
- Network Orchestration (National Institute of Information and Communications Technology)
- High Reliability Software System Verification (JAXA's Engineering Digital Innovation Center)

Media Informatics

Computational Linguistics
Augmented Human Communication
Network Systems
Vision and Media Computing
Interactive Media Design
Optical Media Interface
Ambient Intelligence

Computer Science

Computing Architecture
Dependable System
Ubiquitous Computing Systems
Foundations of Software
Software Engineering
Software Design and Analysis
Internet Engineering
Internet Architecture and Systems

Applied Informatics

Robotics
Intelligent System Control
Large-scale Systems Management
Mathematical Informatics
Imaging-based Computational Biomedicine
Computational Systems Biology
Neural Computation (Visiting)

Biological Sciences

The core focus of the Graduate School of Biological Sciences is to uncover various structures and functions of microorganisms, plants and animals at the molecular and cellular levels, and to clarify principles of the basic phenomena of life and biological diversity. Based on highly advanced basic research, we provide research and development that benefits human well-being, through which we train researchers to play active roles in the global community.

Plant Biology

- Intercellular Communications
- Plant Cell Function
- Plant Development Signaling
- Plant Metabolic Regulation
- Plant Growth Regulation
- Plant Morphological Dynamics
- Plant Immunity
- Plant Developmental Biology

Biomedical Science

- Molecular Signal Transduction
- Functional Neuroscience
- Gene Function in Animals
- Functional Genomics and Medicine
- Molecular and Cell Genetics
- Tumor Cell Biology
- Molecular Immunobiology
- Molecular Medicine and Cell Biology

Systems Biology

- Microbial Molecular Genetics
- Systems Microbiology
- Cell Signaling
- Applied Stress Microbiology
- Structural Biology
- Membrane Molecular Biology
- Gene Regulation Research
- Systems Neurobiology and Medicine

Plant Global Educational Project
■ Plant Function Analysis

Plant Advanced Research Project
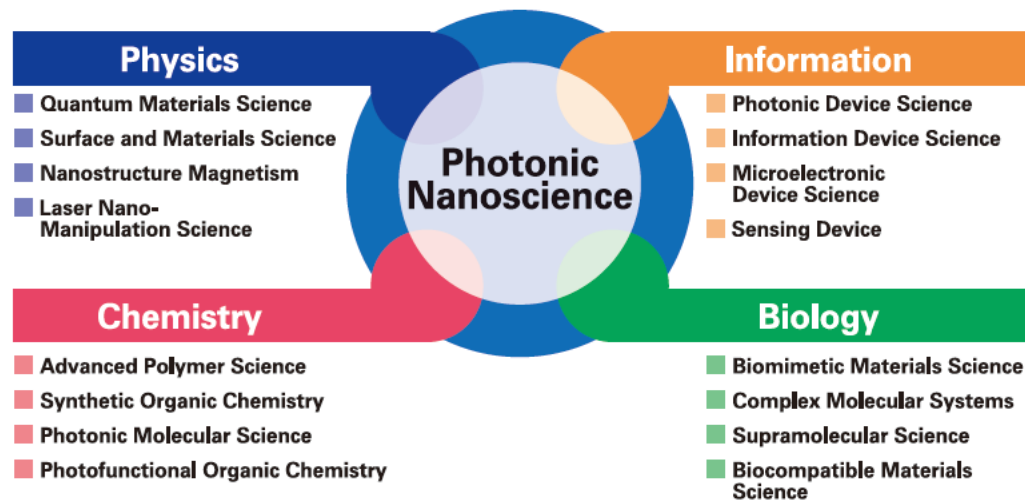■ NC-CARP (NAIST)

Affiliate Laboratories
■ Molecular Genetics of Human Diseases (Osaka Medical Center for Cancer and Cardiovascular Diseases)
■ Tissue Development Dynamics (Center for Developmental Biology, RIKEN)
■ Cell Growth Control (Center for Developmental Biology, RIKEN)
■ Molecular Microbiology and Genetics (Research Institute of Innovative Technology for the Earth (RITE))

Materials Science

The core focus of the Graduate School of Materials Science is "Photonic Nanoscience" which seeks to understand the mechanisms of materials on the electron, atomic, and molecular levels from the perspective of "seeing with light", "creating with light", and "transmitting with light". Researchers aim to create new materials, structures, and functions. We systematically educate students to become excellent leaders in research and development fields in the global society.

Physics
- Quantum Materials Science
- Surface and Materials Science
- Nanostructure Magnetism
- Laser Nano-Manipulation Science

Information
- Photonic Device Science
- Information Device Science
- Microelectronic Device Science
- Sensing Device

Photonic Nanoscience

Chemistry
- Advanced Polymer Science
- Synthetic Organic Chemistry
- Photonic Molecular Science
- Photofunctional Organic Chemistry

Biology
- Biomimetic Materials Science
- Complex Molecular Systems
- Supramolecular Science
- Biocompatible Materials Science

Collaborative Laboratories
- Mesoscopic Materials Science (Panasonic Co., Ltd.)
- Intelligent Materials Science (SHARP Corporation)
- Functional Polymer Science (Santen Pharmaceutical Co., Ltd.)
- Ecomaterial Science (Research Institute of Innovative Technology for the Earth (RITE))
- Sensory Materials and Devices (Shimadzu Corporation)
- Advanced Functional Materials (Osaka Municipal Technical Research Institute)

Specific Research Laboratories
- Organic Electronics
- Green Nanosystem
- Nanomaterials and Polymer Chemistry

Innovative Research and Education Programs

NAIST constantly strives to renew its research and education programs toward producing science and technology researchers prepared to meet the demands facing tomorrow's global scientific community. These programs are regularly awarded external funding for their wide-ranging benefits.

Top Global University Project

In October 2014, NAIST was one of 37 universities selected to the Top Global University Project funded by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). For a period of ten years, MEXT will support outstanding universities in their efforts to reform institutional governance and collaborate with top universities worldwide in order to strengthen international competitiveness. Through the Top Global University Project, NAIST has committed to enhancing its international graduate courses by including a joint degree scheme, developing a new model for graduate education based on top-notch research, reforming institutional governance and strategic agility, creating a campus environment that supports trans-disciplinary education and cultural diversity, and reorganizing its three graduate schools into a single entity toward establishing new, flexible research groups.

Program for Promoting the Enhancement of Research Universities

In October 2013, NAIST was one of 22 universities selected for inclusion in another prestigious MEXT initiative, the Program for Promoting the Enhancement of Research Universities, which aims to improve the research capabilities of universities and research institutions.

Through this program, NAIST continues to conduct frontier-opening research while expanding into new interdisciplinary fields in science and technology. With the establishment of a university-wide strategic research infrastructure, NAIST endeavors to leverage its resources to attain new research materials and facilities necessary for advanced research, to disseminate its achievements and human resources around the globe, and to further expand its global research and education network in order to contribute to the overall advancement of science and technology. Projects being supported through this program include young researcher and research team development programs, international researcher and technology exchange programs and the establishment of joint laboratories both domestically and abroad.

Global Initiatives Program for Promoting Overseas Collaborative Research Toward Graduate Education in Biological Sciences, Nano-science, and Information Technology (Global Initiatives Program)

In response to the rapid redistribution of roles between Japan and the global community, the Global Initiatives Program was started in 2011 with funding from MEXT to promote the cultivation of researchers that will undertake active roles in tomorrow's global science community through the further international expansion and development of NAIST's research and educational activities. This program aims to establish and develop joint research opportunities for students enrolled at NAIST and our overseas partner institutions. NAIST students participate in overseas graduate research programs and international student workshops and students from partner institutions take part in NAIST internships.

International Activity Highlights:

NAIST is now actively engaged in globalization efforts to promote its global standing and enhance its on-campus international environment. Exchange agreements with 77 overseas partner institutions serve as a solid foundation for exchanging researchers, staff, and students each year. The Center for International Relations coordinates and brings consistency to NAIST's globalization initiatives. Some recent activity highlights are included below.

Joint Workshops and Seminars

Joint Workshop
with Hunan University

Joint Workshop
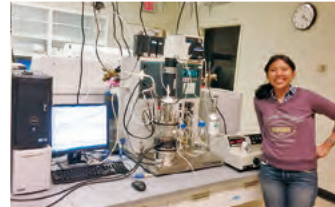with Chinese Academy of Sciences
and UC Davis

Joint Workshop
with St. Petersburg State
Polytechnical University

Overseas Education and Research

Short Term Stay Abroad
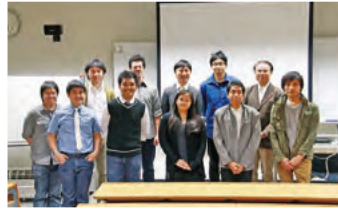at Oulu University

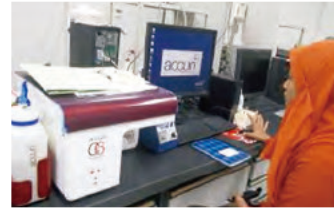Research Stay
at the University of Minnesota

Education and Research
at the University of Michigan

Student Internships at NAIST

From Ateneo de Manila University

From Bogor Agricultural University

From Kasetsart University

Global Campus Events

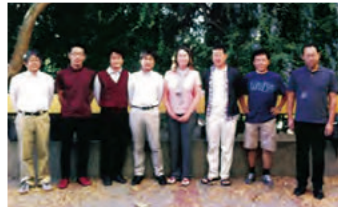Global Campus event: " NAIST Tea Time"

Introduction of Malaysian Tea
by international students from Malaysia

International Friendship Meeting

International Faculty and Staff Development

Faculty Development
at UC Davis

Staff Development
at Hawaii Tokai International College

Staff Development
at Hawaii Tokai International College

Agreements on Academic Exchange with 77 Overseas Institutes in 27 Countries/Regions (as of January 15, 2015)

■ Institution Level Agreements

Country	Institution
USA	University of California, Davis
	University of Hawai'i at Mānoa
	University of California, San Diego
Canada	Queen's University at Kingston
Dominican Republic	Universidad Iberoamericana
Belgium	Université catholique de Louvain
Germany	RWTH Aachen University
	Justus Liebig University Giessen
	Otto von Guericke University Magdeburg
	Karlsruhe Institute of Technology
Finland	University of Eastern Finland
	Åbo Akademi University
France	Université Paul Sabatier
	University of Poitiers
	École Polytechnique
	École Normale Supérieure de Cachan
Italy	The University of Cagliari
Ireland	Trinity College Dublin
Russia	St. Petersburg Polytechnic University
Australia	University of Technology, Sydney
New Zealand	Unitec Institute of Technology
Indonesia	Universitas Gadjah Mada
	Bogor Agricultural University
	Universitas Indonesia
	Hasanuddin University
	Institut Teknologi Bandung
	Universitas Jenderal Soedirman

Country	Institution
China	Institute of Genetics and Developmental Biology, Chinese Academy of Sciences
	Tianjin University of Technology
	Liaoning University
	The Hong Kong Polytechnic University
	Soochow University
	Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
Korea	Gwangju Institute of Science and Technology
	Hanbat National University
	Pohang University of Science and Technology
Malaysia	Universiti Sains Malaysia
	University of Malaya
	Universiti Putra Malaysia
	International Islamic University Malaysia
	Universiti Teknologi Malaysia
	Universiti Tunku Abdul Rahman
India	Indian Institute of Technology Rajasthan
Bangladesh	Bangladesh University of Engineering and Technology
Philippines	Ateneo de Manila University
	University of the Philippines
Thailand	Mahidol University
	Chulalongkorn University
	Kasetsart University
Taiwan	National Chiao Tung University
	Southern Taiwan University of Science and Technology
Vietnam	VNU University of Science
	VNU University of Engineering and Technology
Kenya	University of Nairobi

■ School/Department Level Agreements

■ Information Science

Finland	Department of Information Processing Science, Faculty of Science, University of Oulu
France	Telecom SudParis
Germany	Faculty of Engineering and Computer Science, University of Ulm
China	School of Information Science and Engineering, Hunan University
	Department of Computer Science and Technology, Tsinghua University
	Department of Computer Science, City University of Hong Kong
Lao PDR	Faculty of Engineering, National University of Laos
Vietnam	Institute of Information Technology, Vietnam Academy of Science and Technology

■ Biological Sciences

U S A	BioTechnology Institute, University of Minnesota
Canada	Faculty of Science, The University of British Columbia
Vietnam	Institute of Biotechnology, Vietnam Academy of Science and Technology
Australia	Centenary Institute of Cancer Medicine and Cell Biology

■ Materials Science

U S A	Macromolecular Science and Engineering Center, College of Engineering, University of Michigan
Germany	Faculty of Engineering, RheinMain University of Applied Sciences
Switzerland	Faculty of Science, University of Zurich
Netherlands	Faculty of Science, Leiden University
	Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology
Hungary	Doctoral School of Physics, University of Debrecen
China	School of Chemistry and Chemical Engineering, Nanjing University
	Department of Chemistry, Northeast Normal University
India	Indian Institute of Science Education and Research, Thiruvananthapuram
Vietnam	Institute of Materials Sciences, Vietnam Academy of Science and Technology
Australia	School of Pharmacy and Molecular Sciences, James Cook University

The Center for Industry-Government-Academia Collaboration

The Center for Industry-Government-Academia Collaboration engages in the active promotion of joint research, commissioned research, technology transfer and other related activities, supporting NAIST's top class productivity.

In 2014, NAIST was selected for inclusion in the Enhancing Development of Global Entrepreneur (EDGE) program, funded by MEXT for three years. Through this program, NAIST will support the creation of promising new businesses to promote innovation.

METI Intellectual Property Achievement Award

- The first university to be awarded the Intellectual Property Achievement Award by the Ministry of Economy, Trade and Industry (April 2011)

- Consistently among the highest income earning national universities (per faculty member)

- Consistently among the highest external research funding received by a Japanese institution (per faculty member; totalling roughly 3 billion yen annually)

- Consistently among the top spin-off producing Japanese universities

Message from
Professor Shinya Yamanaka

2012 Nobel Laureate in Physiology or Medicine
Director, Center for iPS Cell Research and Application,
Kyoto University
Honorary Professor, Nara Institute of Science and Technology

Photo taken at NAIST 20th Anniversary Commemorative Ceremony

From NAIST introduction video

"Currently, my group is conducting research on "iPS" cells, a kind of stem cell, and most of the crucial research which led to the creation of iPS cells began during the five years when I was at NAIST. In other words, without the research conducted in Nara, I don't think iPS cells could have been achieved and I think we would now be pursuing a completely different area of research. Professors at NAIST come from various fields, such as medicine in my case, and others have backgrounds in engineering, science, agriculture, and so on, so NAIST faculty are truly engaged in a broad spectrum of research areas. Not only fundamental research but also applied research and so many kinds of research are being conducted, so even from the perspective of industry partners, there are many opportunities to conduct collaborative research at NAIST, which makes NAIST a very unique research institute, in my opinion.

With the extremely high level of both its research environment and faculty, NAIST is one of the top research universities in Japan. Although I am now researching iPS cells at Kyoto University, even now most of the core members supporting me in my lab are colleagues and former students from my time at NAIST who came to Kyoto to work with and support me. Nara really is an excellent place to conduct research and I sincerely hope that many students and researchers will choose to pursue their research in Nara."

ACCESS
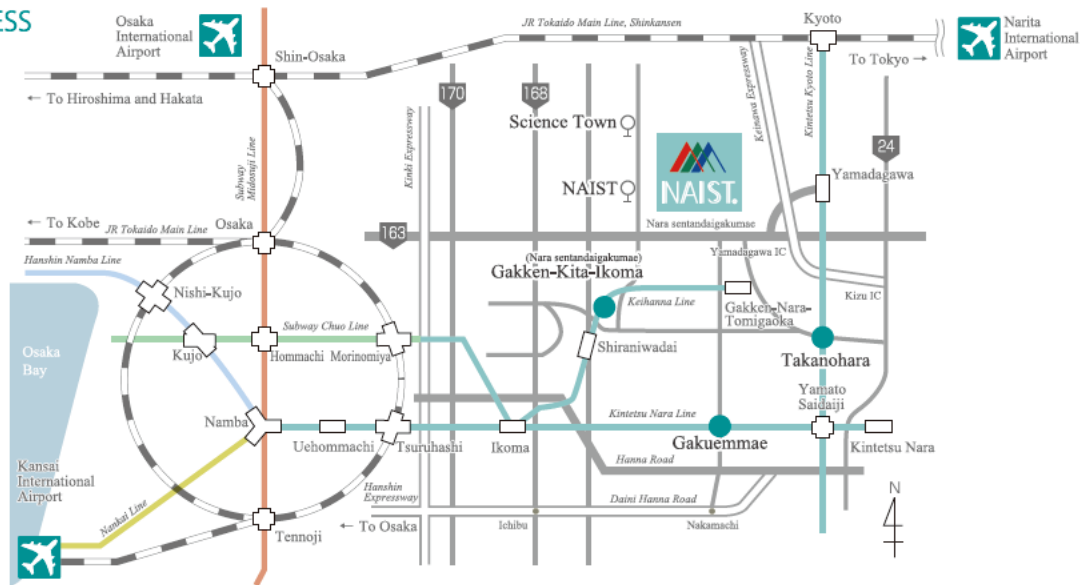
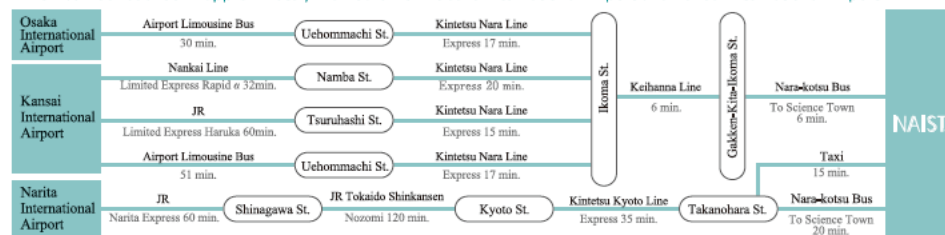**In addition to its main campus, NAIST has liaison offices in Tokyo and Higashi-Osaka.**

NAIST Tokyo office

NAIST Higashi-Osaka office

NAIST can be reached in approximately 1.5 hours from Osaka International Airport and Kansai International Airport.

Osaka International Airport	Airport Limousine Bus 30 min.	→ Uehommachi St.	Kintetsu Nara Line Express 17 min.					
Kansai International Airport	Nankai Line Limited Express Rapid α 32min.	→ Namba St.	Kintetsu Nara Line Express 20 min.	Ikoma St.	Keihanna Line 6 min.	Gakken-Kita-Ikoma St.	Nara-kotsu Bus To Science Town 6 min.	NAIST.
	JR Limited Express Haruka 60min.	→ Tsuruhashi St.	Kintetsu Nara Line Express 15 min.					
	Airport Limousine Bus 51 min.	→ Uehommachi St.	Kintetsu Nara Line Express 17 min.				Taxi 15 min.	
Narita International Airport	JR Narita Express 60 min.	→ Shinagawa St.	JR Tokaido Shinkansen Nozomi 120 min.	Kyoto St.	Kintetsu Kyoto Line Express 35 min.	Takanohara St.	Nara-kotsu Bus To Science Town 20 min.	

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from Japan

NARA INSTITUTE of
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