

# Top Global University Project (Type B) NAIST

## 1. Outline

### 【Name of project】

NAIST Global<sup>3</sup> : cultivating Global leaders through Global standard graduate education on a Global campus

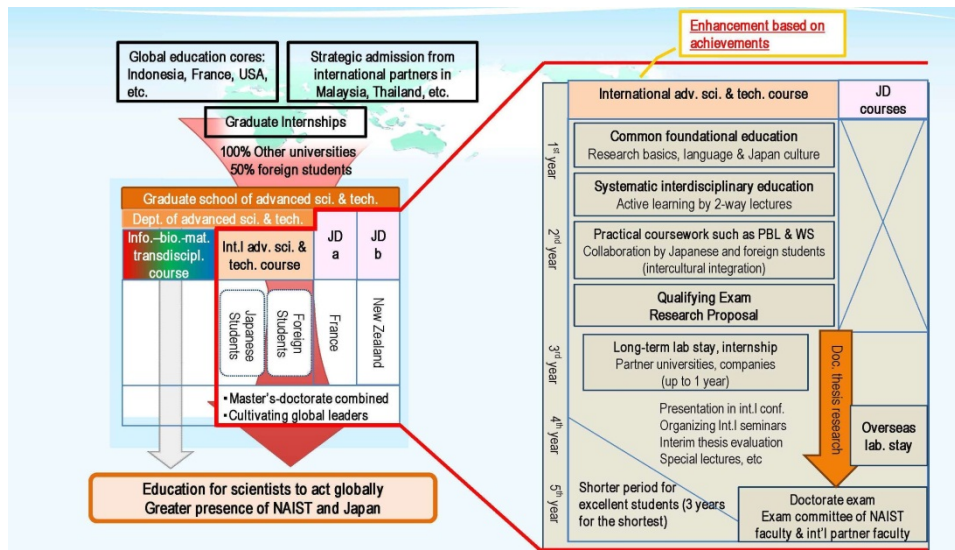
### 【Future vision of the university planned in Top Global University project】

NAIST Global<sup>3</sup> is a motto to (1) establish an international degree program for Global leaders, (2) develop a graduate educational model for high Global standard research, and (3) promote interdisciplinary education at Global campus with culturally diverse faculty, staff, and students.



### 【Summary of project】

NAIST will strive for global excellence in graduate education for advanced science and technology, specifically in three fields: Information Science, Biological Sciences, and Materials Science. Our current structure of three graduate schools will be merged into one integrated framework for advanced interdisciplinary education and research. Also, an international graduate program for advanced science and technology (5-year degree program) will be established. The program will offer a joint degree program with universities abroad. NAIST faculty and staff will benefit from faculty and staff development programs overseas. A support center for international students and researchers will become an integral part of the global campus for diverse faculty, staff, and students.





## 2. FY2014 Progress

### ■ Common indicators and targets

#### Internationalization

##### ● NAIST Top Global University Project Kick-off Symposium

In March 2014, NAIST hosted a symposium to discuss global trends in graduate education in the areas of advanced science and technology. Diverse speakers from affiliated universities gave lectures on global issues surrounding internationalization in higher education.

##### ● English Version of the University Guidebook

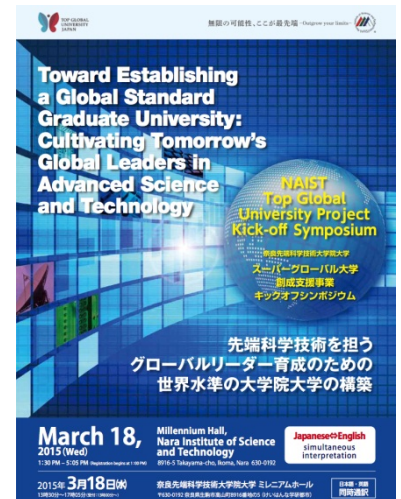
An English version of the University Guidebook is key in recruiting international students. The English guidebook was sent to NAIST's partner and related institutions, and widely distributed at various Study-in-Japan and Study-at-NAIST fairs.

##### ● International collaborative education programs

Joint degree program feasibility was examined in accordance with the related ministerial act. The final consultation was made in January 2015 to seal a double-degree program agreement with Unitec in New Zealand in May 2015.

##### ● Overseas Staff Development Seminar

An overseas staff development seminar and English conversation classes were held to strengthen organizational capacity to support the globalizing of education and research.



#### University reform

##### ● Establishment of the Center for Strategy and Planning

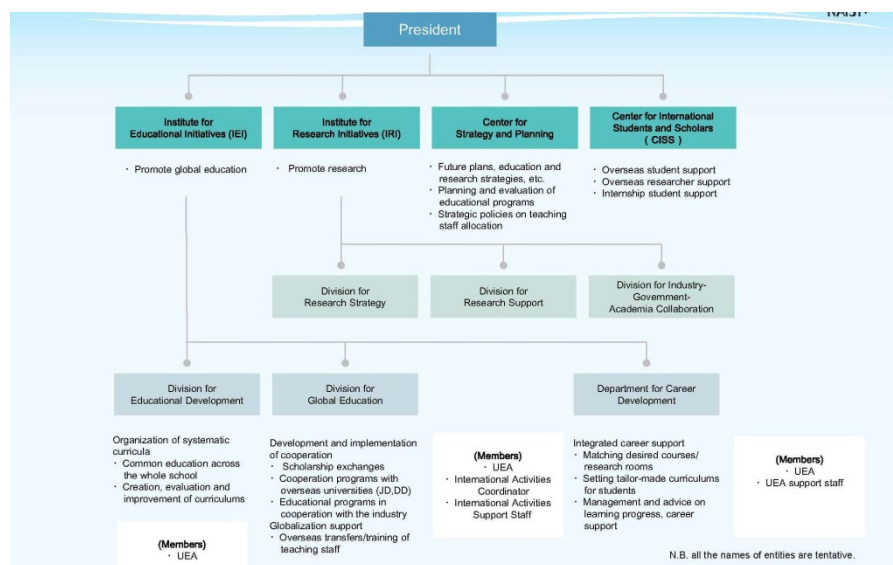
The Center for Strategy and Planning is placed immediately under the leadership of the President to unify planning of the future framework of university establishment systems and education and research strategies. The Center for Strategy and Planning operates as the headquarters for university management and institutional governance reformation through planning and evaluation of educational programs, and strategic policies on teaching staff allocation.

##### ● Organizing the Institute for Educational Initiatives (IEI) and Institute for Research Initiatives (IRI)

IEI has been set up to promote program planning and evaluation, and support education in order to cultivate global graduate education. IRI has been set up to support institutional research put forth in *The Program for Promoting the Enhancement of Research Universities*. Both are placed under the leadership of the President, closely connected with each other.

##### ● URAs & UEAs

University Research Administrators (URAs) analyze national and international trends of interdisciplinary research in the fields of science and technology. URAs also take part in expanding international networks for joint research. University Education Administrators (UEAs) engage in assessment of students' aptitude, curriculum development and teaching evaluation, academic and career support for students, and exploration of potential partnerships with academic institutions abroad.





## Education reform

### ● Overseas Faculty Development Seminar

Newly appointed faculty at NAIST participated in the Overseas Faculty Development Seminar at the University of California, Davis, in October. The participants experienced how to incorporate active learning into their curriculum to meet students' diverse needs. Such pedagogical support is the groundwork for preparing a quality learning environment as the top-level graduate institution.

### ● Improved Japanese Language Proficiency of International Students

Japanese classes for 2015 at elementary and intermediate levels are under preparation. Language lessons are an integral part of successful student life for international students. Japanese language acquisition and communication skills are necessary for finding employment at Japanese companies in Japan or overseas.

### ● Improved English Language Proficiency of Japanese Students

The core competence expected of Japanese master's students includes acquiring skills to comprehend research articles published in English, as well as lectures and seminars delivered in English. Doctoral students are expected to present their research in English, and to acquire negotiation and trouble-shooting skills. TOEIC is used as a measure to evaluate and monitor students' English proficiency.

## ■ University's own indicators and targets

### ● Globalization concerning campus regulations

NAIST initiated use of English in internal conference reports (conference titles only) and notification letters at all three graduate schools in 2014. This change encourages attendance of international faculty members at meetings. English versions of campus standards and regulations are under preparation.

### ● International environment promotion

NAIST further facilitated globalization in the cafeteria area, having English menus and installing a HALAL food section in the union store for our international students and researchers from diverse backgrounds.



## ■ Featured initiatives based on the characteristics of the university

### ● Career support for international students in Japanese firms

The number of NAIST's international students (doctoral course) hired by Japanese enterprises exceeded 30%.

### ● Career support for international students returning home

The number of NAIST's international graduates (doctoral course) hired as faculty in their home countries exceeded 20%.



## ■ Free description

### ● NAIST was featured in Science magazine

NAIST was featured in the prestigious Science magazine showcasing the "Top Global University Project" to enhance globalization and international recognition. (magazine: March 27/ad banner: March1-31)



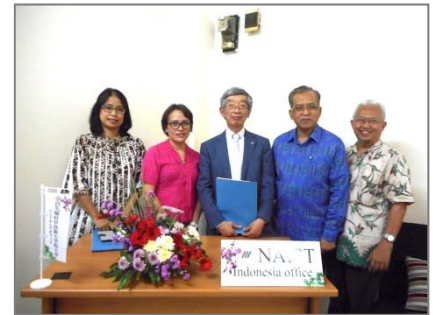
### 3. FY2015 Progress

#### ■ Common indicators and targets

##### Internationalization

###### ○ Overseas Education Collaborative Office in Indonesia

NAIST opened its first Overseas Education Collaborative Office in Bogor, Indonesia. As an Asian hub, the office will strengthen NAIST's international presence with objectives of improving recruitment and selection of international students, furthering relations with partner institutions and corporations, and promoting collaborative education and research with NAIST alumni in Indonesia and surrounding areas.



〈Opening of Indonesia Office〉

###### ○ The 2<sup>nd</sup> Top Global University Project Symposium

NAIST hosted the “Challenges and Opportunities: Graduate Education in Science and Technology towards Global Engagement” symposium with keynote speakers from the National Science Foundation (USA), European Commission, and A\*STAR Graduate Academy (Singapore). The symposium explored issues facing graduate education today in cultivating students' qualities for tomorrow's science and technology.



〈Symposium Program〉

###### ○ Educational Collaboration with Domestic Partner

NAIST signed a memorandum of understanding with International Christian University (ICU in Japan) to strengthen collaborations in global education for science and technology.

###### ○ Staff Development

The Overseas Staff Development Program (Hawaii Tokai University) and a series of English conversation classes were held as part of the staff's professional development. Improved English proficiency and administrative skills will support campus globalization.

##### University reform

###### ○ Structural Reform

The Center for Strategy and Planning led by the President initiated reform movements concerning institutional management and governance. The Institute for Educational Initiatives promoted efforts towards program planning, evaluation, and support of global graduate education.

###### ○ UEAs

International development University Education Administrators (UEAs) furthered global education support planning and the implementation of international partnerships, and faculty/staff development programs, etc. The appointment of UEAs for career/curriculum development to engage in career support, students' professional aptitude assessment, curriculum development, and evaluation and improvement of teaching effectiveness

###### ○ Support for International Students, Faculty, and Scholars

Fulltime staff members were employed to provide a wide range of services for international students, faculty/staff, and scholars. University materials such as policies and regulations became available in English to promote information accessibility.



〈Symposium Organizing Committee with Keynote Speakers〉

##### Education reform

###### ○ Japanese Proficiency of International Students

Japanese lessons were held to improve students' language proficiency to facilitate communication in their academic and future career.



〈Faculty Development Program〉

###### ○ International Collaborative Curricula

In addition to existing double-degree programs with Oulu University (Finland) and Paul Sabatier University (France), NAIST added programs with National Chiao Tung University (Taiwan), Unitec (New Zealand), and University of Malaya (Malaysia). The programs will further educational opportunities for both inbound and outbound students.

## Education reform (continued)

### ○ Faculty Development

The Overseas Faculty Development Program was held at the University of California, Davis. Seminars in university teaching and learning, followed by laboratory visits, are learning opportunities for NAIST faculty members to prepare for top-level graduate education in science and technology.



〈NAIST Introduction at Partner Universities〉

### ■ University's own indicators and targets

#### ○ English Proficiency of Students and Staff Members

As English communication skills are essential for realizing a global campus, TOEIC scores are used to assess and monitor the learning progress of students and staff member. In addition, emphasis was put on practical skills for academic studies and future research and employment. Master's students are expected to develop abilities necessary for comprehension of research articles, lectures, and seminars delivered in English. Doctoral students must be capable to disseminate their research findings globally using English, including debate and deliberation skills. Staff who support international activities, including academic and research programs, are required to pursue English proficiency to improve their overall performance.



〈Guidebooks in English〉

#### ○ English Use in Educational Programs

As part of globalizing efforts in graduate education, syllabi for courses offered in all three graduate programs became available in English. To prepare for a transition to a unified graduate program in the next few years, as well as an addition of international program for advanced science and technology (5-year doctoral program) to the curricula, English will become a primary medium of communication and instruction.



〈Flyer of Division for Global Education〉

### ■ Featured initiatives based on university characteristics

#### ○ Public Relations Efforts

Each year, NAIST delegations actively visit international partner education and research institutions, governmental offices, "Study in Japan" fairs, and others. English materials including guidebooks are critical in introducing our educational and international activities. Division for Global Education is now furnished with a flyer to explain NAIST's approach to the Top Global University Project. NAIST widely distributes these materials to improve its presence in the international educational and research community.

#### ○ Comprehensive Life and Academic Support

With growing numbers of international students, faculty/staff, and scholars on campus, NAIST is focusing on being able to provide comprehensive support, ranging from pre-departure preparation to academic and personal life assistance. Services will extend to accompanying spouses and families.

#### ○ Career Support

UEAs in charge of career development were appointed to support international students seeking career in Japan and/or Japanese companies abroad through career guidance, information meetings, and fairs on campus. Also, a newly launched Indonesia Office will become a hub for students and alumni in Indonesia and surrounding areas to broaden the support network.

#### ○ Social Integration

Social integration is key for successful learning and living. Japanese language and culture courses are required for all international students to support their integration in Japan. NAIST organizes numerous cultural events to familiarize international students with various Japanese traditions, including day trips to historic Nara, sutra copying and lectures at Buddhist temples, flower arrangement (Kadō), Japanese confectionery (Wagashi) making, Ninja experience, and more.



〈NAIST Tea Time〉

### ■ Efforts to Realize Global Campus

NAIST believes in the importance of a truly multicultural community. Our signature global campus event, "NAIST Tea Time", aims at strengthening our on-campus community and fostering mutual understanding and cultural familiarity among NAIST's diverse population. Also, NAIST offers a bilingual menu at the cafeteria and Halal options in the convenience store to accommodate diverse needs of the international population.



## 4. FY2016 Progress

### Common Indicators and Targets

#### Internationalization

##### ○ NAIST Indonesia Office

In cooperation with the Indonesian NAIST Alumni Association, the NAIST Indonesia Office was opened in Bogor in April, and an inaugural symposium was held in August to commemorate the opening in the presence of representatives from various Indonesian universities, Indonesian governmental offices, and Japanese companies in Indonesia.

##### ○ UGM-NAIST Collaboration Office

The UGM-NAIST Collaboration Office was opened in the Center for Biotechnology Studies at Gadjah Mada University (UGM) in June to serve as a catalyst for enhancing academic and research collaborations with NAIST alumni at UGM and other universities in Indonesia.

##### ○ NAIST Thailand Office

The NAIST Thailand Office was established within Kasetsart University's Faculty of Engineering in March as a central point in Asia for global collaboration in higher education and research, such as recruiting international students, enhancing cooperation with partner universities, and strengthening NAIST alumni networks.

#### University Reform

##### ○ The Center for Strategy and Planning

The Center for Strategy and Planning led by the President analyzed current academic exchange progress and addressed the advancement of collaborations with international partners.

##### ○ Transition to One Graduate School

Newly appointed UEsAs for curriculum development prepared for the one graduate school in response to societal demands and students' needs for a multidisciplinary integrated program.

##### ○ The Center for International Students and Scholars (CISS)

CISS, established in April, served as a one-stop service hub for international students and scholars to facilitate their social and cultural integration. Such services included academic and daily activity support, such as assisting in visits to local government offices, bank and medical facilities.

#### Education Reform

##### ○ Faculty Development (FD) Program

Highly specialized curriculum of the International Faculty Development Program at the University of California, Davis (USA), introduced various practical pedagogical methods and strategies to participating faculty members, who then shared what they gained through participating in the institute executive meeting and departmental FD seminars.

##### ○ Staff Development (SD) Programs

English conversation classes helped improve speaking ability of the staff members. Additionally, the International Staff Development Program was expanded to an upper level based on job shadowing at Macquarie University (Australia) and an intermediate level with a focus on on-site interviewing at the University of California, Davis (USA), and Hawaii Tokai International College (USA), to further promote understanding of administrative operations globally.

##### ○ Double-Degree Programs

Through the double-degree programs, two NAIST students were sent to University Paul Sabatier (France) while two students from Unitec Institute of Technology (New Zealand) and one student from Oulu University (Finland) were enrolled in NAIST. In addition, NAIST concluded an academic agreement to encourage student exchange with the College of Engineering of National Chiao Tung University (Taiwan) to further enhance our relationship including the current double-degree program.



〈 Indonesia Office Inaugural Symposium 〉



〈 UGM-NAIST Collaboration Office Opening 〉



〈 Opening Ceremony of Thailand Office 〉



〈 International FD Program 〉



〈 International SD Program 〉

## ■ University's Own Indicators and Targets

### ○ English Proficiency of Students and Staff Members

Students of all graduate schools took the TOEIC test, and the scores were used as an indicator of English proficiency. TOEIC scores of the staff members drastically improved in FY2016 as they were expected to support the continued internationalization of educational and research programs.

### ○ Regulations and Syllabus in English

Translation of regulations and documents to facilitate the experience of NAIST's international community members was completed. Also, syllabi for courses offered in all graduate schools became available in English, which led to globally-focused curriculum development within the one graduate school.



〈 Participation in "Study in Japan" Fairs 〉

## ■ Featured Initiatives based on University Characteristics

### ○ International Alumni Network

Alumni in Indonesia volunteered to represent NAIST at the *Career & Scholarship Expo 2016* at Bogor Agricultural University (Indonesia), actively introducing our academic programs. An on-site staff member, a NAIST Indonesian graduate, is currently stationed in the NAIST Indonesia Office to support collaborative operations and to handle public relations in both English and Indonesian.

### ○ International Public Relations

The design and content of NAIST's websites, both in Japanese and English, were renewed. The websites became mobile friendly and easier for users to obtain up-to-date information. In addition, the NAIST's Top Global University Project website was renovated. Moreover, promotional materials in English were widely distributed around the globe, including to our partner universities, at "Study in Japan" fairs, and to overseas offices in Indonesia and Thailand, to actively introduce NAIST's educational and research activities.



〈 NAIST Introduction at Partner Universities 〉

### ○ Collaborations with Academic and Research Institutions

To further graduate education based on world-leading research, NAIST concluded new academic agreements with top research institutions (e.g., Nanyang Technological University in Singapore, Indian Institute of Technology Bombay in India). Academic collaborations deepened with partner universities through international student workshops, joint symposia, student exchanges, etc.



〈 Indonesian Alumni Introducing NAIST 〉

### ○ Japanese Language and Cultural Classes

Japanese language and cultural courses for international students were offered to enhance communication skills and to promote understanding of Japanese traditions and customs. A self-study e-learning system was introduced in the classroom to facilitate the learning process.

### ○ Career Support for International Students

A newly appointed UEA in charge of career support for international students offered career support services in English. Also, easy access to career resources in English through the newly launched website facilitated student inquiries concerning their career paths. Moreover, the employment rate for international students improved as the UEA established networks with Japanese companies.



〈 Career Support Website in English 〉

## ■ Efforts to Realize Global Campus

### ○ Global Campus Events

Our signature global campus event, "NAIST Tea Time", is intended to increase cultural understanding within the diverse campus population by offering presentations from diverse speakers in an at-home atmosphere with various cultures' drinks and foods. In FY2016, the events were opened to the public to strengthen relationships with local community members as well as to broaden their awareness on NAIST's cultural diversity.



〈 Global Campus Events 〉



## 5. FY2017 Progress

【奈良先端科学技術大学院大学】

### ■ Common indicators and targets

#### Internationalization

##### ○ NAIST Indonesia Office

To place permanent staff member at the NAIST Indonesia Office, NAIST contracted the Indonesian NAIST Alumni Association to place a NAIST Alumni at the office, allowing for PR activities to be performed locally at recruiting fairs, etc. in Indonesian.

##### ○ NAIST Thailand Office

NAIST joined the Japanese Universities' Network in Thailand (JUNThai) to expand our network with education and research institutions, while holding a NAIST Thailand Office inaugural symposium in September as part of the TGU Project to improve our education and research presence. Also, through collaboration with Thai Alumni NAIST concluded an academic agreement with another top-level Thai university. (Chiang Mai University)

##### ○ Diverse Faculty and International Students

NAIST diverse faculty has been achieved through international recruitment, domestic recruitment stressing education and research experience abroad and the continuing long-term faculty dispatchment program. Also, NAIST participates in study abroad fairs and actively recruits students at partner institutions, so that our international population is, while centered around Southeast Asia, geographically diverse. We currently have students from 33 countries and regions around the globe.

#### University Reform

##### ○ Faculty Development (FD) Program

The FD program was held abroad with participants observing classes and meeting with professors and TAs to learn about PBL, active learning, and roles of TAs, to further promote student-focused education. An on-campus debriefing meeting and graduate school training sessions were held to spread the knowledge they gained throughout NAIST to improve teaching methodology.

##### ○ Staff Development (SD) Activities

Through English training and overseas SD training the number of full-time staff (37 as of March 2018) that passed the foreign language requirement (TOEIC 750+ points) met the goals previously set, and NAIST was able to have a qualified English-speaking staff member at each administrative division/office. This was highly assessed in the 2017 TGU Project evaluations. Also, through the continuously held English training that is redesigned each year, the average staff TOEIC score has risen.

#### Educational Reform

##### ○ Transition to a Single Graduate School

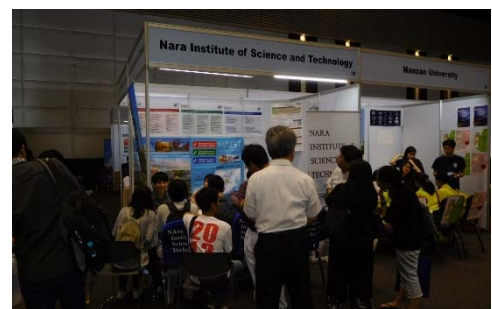
To establish a structure for the flexible and expedient organization of interdisciplinary educational curriculum of the 3 current fields and with the current graduate school curriculum, NAIST resolved to create a 1 graduate school, 1 department structure in 2018. In it, 7 education programs foster globally active human resources with broad and highly specialized knowledge of advanced science and technology, with internationally focused faculty gathering from different fields to educate to develop the specialized skills and knowledge and the broad understanding demanded by society and for interdisciplinary research collaboration and education.



〈 NAIST Indonesian Staff PR Activities 〉



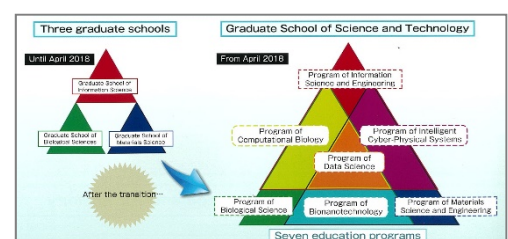
〈 NAIST Thailand Office Inaugural Symposium 〉



〈 NAIST Booth at Japan Education Fair 〉



〈 NAIST Overseas SD Debriefing Session 〉



〈 Transition to a Single Graduate School 〉

■ University's Own Indicators and Targets

○ Improved International Student and Scholar Support

The Center for International Students and Scholars (CISS) was re-organized and campus announcements led to an increase in cases handled (762 in total). Also, the Partner Opportunities Program (POP) planned in the TGU Project to promote recruiting of international faculty and the NAIST International Student Ambassador Program were set up, allowing for expanded support for international students and researchers, including increased dissemination of related information in English and Japanese.

○ A Global Campus Connecting with the community

NAIST Tea Time was held twice as Global Campus Events where NAIST faculty, staff and students, and members of the community gathered together to learn about other cultures and build ties. Also, the International Friendship Meeting was held in January, with a record attendance of 321 from within NAIST and other organizations, both private and municipal, that offer support for our international students, to promote understanding and further expand NAIST's international community.

■ Featured Initiatives based on University Characteristics

○ Furthering Double Degree Program Measures

In February 2018 NAIST's Double Degree Guidelines were formulated to assure high educational standards, while in the same school year the first double degree program graduates received their doctoral degrees. Especially, the 2 students NAIST sent to Paul Sabatier University who completed the double degree program under international collaborative supervision were both chosen for the Outstanding Student award. Additionally, to further develop the double degree program, NAIST signed a Double Degree Program Agreement with the University of Ulm (Germany) in July, 2017, while also being able to sign an agreement with University of Paris-Saclay during a courtesy visit to their campus in March 2018.

○ Publicizing the Creation of the New Graduate School

Necessary revisions to the NAIST Laboratory Introduction 2018 and the 2018 NAIST Guidebook were made reflecting the new single graduate school structure. In December an English leaflet based on the Japanese one explaining the single graduate school transition was produced and distributed to overseas institutions and offices to introduce the new education system to international students. Also, access to information for international students, current and prospective, was made easier through a special site explaining the graduate school transition and preparations for renewal of the English website in April in accordance with the new graduate school were undertaken.

○ International Student Career Planning Support

With Japanese corporations requiring advanced Japanese skills, an N1, N2 Japanese Proficiency Exam preparation course was held for those students wishing to work in Japan. A job fair was held on campus to assist international students in meeting with suitable Japanese corporations. Various career planning support was offered including business start-up seminars for those students who are interested in starting their own venture business.



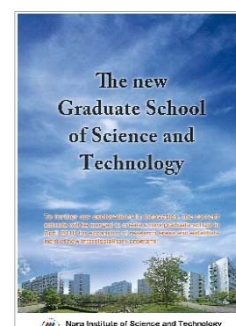
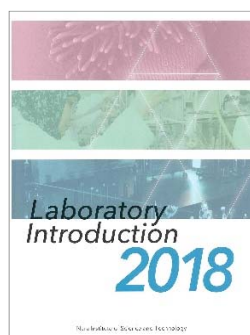
〈Center for International Students and Scholars (CISS)〉



〈 NAIST Global Campus Event 〉



〈 NAIST 2018 Graduation Ceremony (March) 〉



〈 English Lab Introduction 〉 〈 Graduate School Leaflet 〉



〈 New Graduate School Special Website 〉