## 1.　Outline

[Name of project]

Creative Campus for Nurturing Global Technology Architects

[Future vision of the university planned in the TGU project]

With the progress of globalization in economics and society, Japan needs to strengthen the international competitiveness of its universities and develop human resources who can be globally active in various fields, with a view to continuing such development. Welcoming technical college graduates and many young international students, Toyohashi University of Technology (Toyohashi Tech) strives to provide an engineering education university-wide that goes beyond the barriers of language and culture, and to create a campus that can be recognized internationally as a university of technological science that fosters leading engineers active on the global stage.

[Summary of Project]

Toyohashi Tech endeavors to foster "Global Technology Architects", who are creative leaders in technological science with a solid international grounding and will be needed in future society, through realizing a "multicultural and global campus," where domestic and international students, faculty members and university staff cultivate each other beyond the boundaries of languages and cultures. For that end, the university has worked on initiatives focusing on the following three points: "Global Technology Architects course," "Multicultural Boarding House," and "Global capability upgrade of all students, faculty members and university staff." Toyohashi Tech promotes globalization across the campus with these initiatives as a core of this project and will transform the university to a place that is truly recognized and competitive in the international community and that supports the global competiveness and sustainable economic growth of our nation's industries in a profound way.
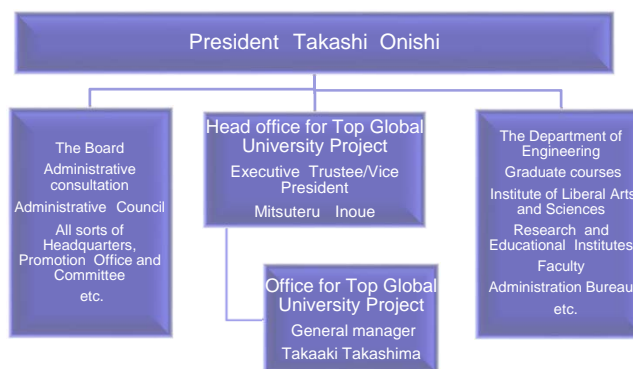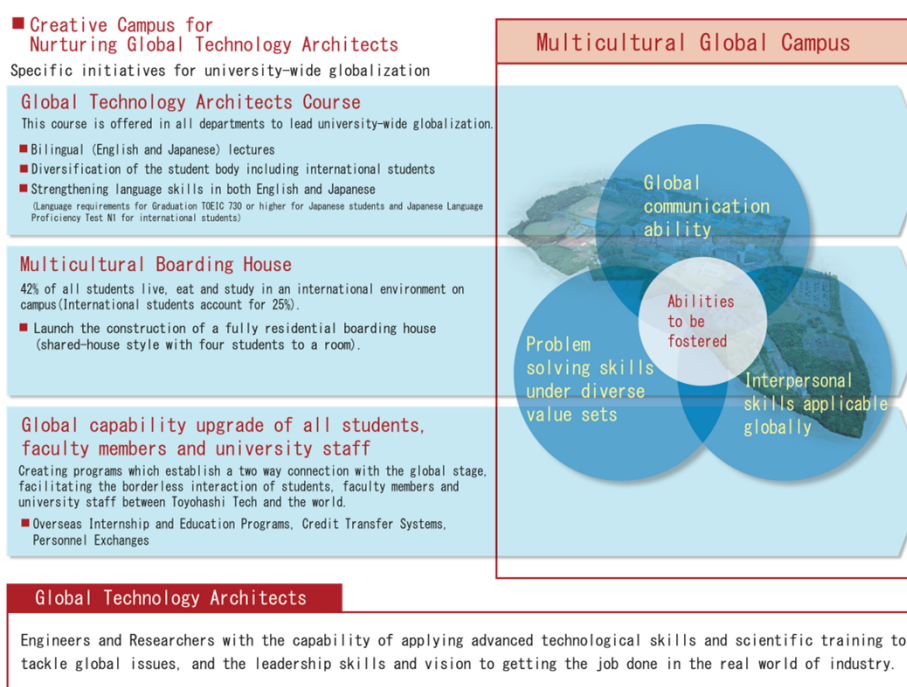
Implementation system

[Summary of the 10-year plan]

1. "Global Technology Architects course"

Aiming at nurturing global human resources in technological science , we design an educational and admission system for the "Global Technology Architects course" in FY 2014-2015, and explain about what the course is like and how to apply for it to technical colleges (KOSEN), etc. in FY 2015. The entrance examination of this course starts in FY 2016. This course will be offered to all the departments as a combined 6-year undergraduate and graduate course, and the students will learn through bilingual (English and Japanese) lectures. The university will begin to accept third year transfers in FY 2017 and first year students in FY 2018.

The feature of this course lies in English-Japanese bilingual lectures. We plan to expand bilingual lectures in the entire. To facilitate bilingual lectures, we provide language learning assistance. With this, Toyohashi Tech will promote university-wide global engineering education beyond the boundary of languages.

2. Global Boarding House

All students enrolled in the "Global Technology Architects course" will in principle live in a fully residential boarding house, and we plan to newly build a Global Boarding House to accommodate them. We start preparation for construction in FY 2014-2015, and the construction begins in FY 2016. We are preparing to construct a multicultural and multilingual education-oriented boarding where the students share diverse values and develop interpersonal skills that are needed for future leading engineers. We are developing a living/education management system for the students living in this boarding house and accept students from FY 2017.

We aim to deepen and promote globalization by realizing the environment where domestic and international students live and learn together at the Global Boarding House and expand this global and multicultural environment to include the entire campus.

3. Global capability upgrade of all students, faculty members and university staff

With the aim of promoting multinational human resources and international compatibility across the campus, we will continuously create and implement programs which establish a global rotation of human resources, facilitating borderless interaction of students, faculty members and university staff between Toyohashi Tech and the world. In FY 2015-2016, we will carry out consultations with key overseas partner universities with the aim of full-fledged implementation of the personnel exchange program in FY 2017. Following that, the university will expand this initiative to other overseas partner schools. The first attempt is to establish a system to dispatch faculty members and university staff to Queens College of the City University of New York to promote English language ability and expand their global insight into research, education and operationd. This starts in FY 2015.

【Featured initiatives (Internationalization, University reform, Education reform)】

(1) Global human resources development through the comprehensive undergraduate/graduate program:

Eighty percent of our students are graduates of KOSEN who transferred straight to third year. We have fostered practical engineers, who are strong in monotsukuri (craftsmanship), through their comprehensive undergraduate/ graduate (Master's degree) program. We reviewed this educational system from a global point of view and further developed it with the concept of "Global Technology Architects" aiming at nurturing global human resources.

We continuously develop the relationship with KOSEN by the personnel exchange program, a global FD program, and KOSEN students' experience program at Toyohashi Tech.

(2) English-Japanese bilingual lectures:

We offer bilingual lectures to the students on the Global Technology Architects course, so that they can learn through dual language channels to facilitate globally innovative research. We expand bilingual lectures to the entire university.

The Global Technology Architects course accepts international students from the first year of the undergraduate program. We also expand joint-degree/double-degree programs with our overseas partner universities. These initiatives will help to facilitate borderless interaction of students and promote globalization and diversification of students.

(3) Strategic utilization of Toyohashi Tech's overseas educational base in Malaysia:

We strategically utilize our educational base in Penang, Malaysia, to foster Global Technology Architects through conducting practical training, recruit international students from ASEAN countries, implement the entrance examination, and collaborate with local universities and communities. We promote the development of human resources who will contribute to the growth of the technology industry in ASEAN countries which enjoy recent remarkable economic growth. We will further expand this to Europe and America.

(4) Creation of a multicultural and global campus through the education-oriented global boarding house:

The students of the Global Technology Architect course will, in principle, live in the boarding house. We will newly build a share-house style boarding house to create an environment where the students and faculty members from various countries with a diverse sense of values live together. Together with the existing student apartments, the dormitories will accommodate over 40% of the entire student population, 25% of which will be international students. This is expected to serve as the core to spur university-wide globalization.

2. FY2014 Progress

■ Common indicators and targets

Internationalization

○ **Commenced the preparation to establish "Global Technology Architects course"**

We have formulated an overview of this course (acceptance of third year students to be started in FY 2017 and first year students in FY 2018). This course is expected to be attractive to capable international students. To recruit such students, the university visited their major partner universities in ASEAN and other. We explained about the project, and launched the measures to establish a system for support and cooperation. We also held an overseas alumni reunion and organized a foreign alumni association to actively utilize the alumni network of international students.

○ **Formulated bilingual (English and Japanese) lectures and the curriculum to strengthen language skills**

We set up a number of working groups to discuss the framework of the bilingual (English and Japanese) lectures, and partly launched the pilot project this fiscal year. We have established the policy for language curriculum reform to enhance language ability and started to work on the details this fiscal year.
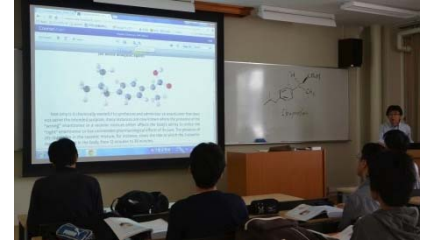
(Bilingual lecture on a trail basis)

○ **Preparation to construct global boarding house**

We have conducted studies on the methods to procure and collect funds and the basic requirements/management policy to construct the share-house style boarding house where Japanese and international students live together. The outsourcing company for advisory has already been decided, and the selection of other companies and a detailed design were launched this fiscal year in preparation for the start of construction next fiscal year.

○ **Support system to enhance global communication abilities**

We have improved and reinforced e-learning materials for English study with the aim of enhancing global communication ability targeting all students, faculty members and university staff. An English learning support system has also been established: the advisors for English study are stationed on all weekdays; an individual consultation service has started; English seminars are regularly organized. Moreover, a special seminar entitled "How teach effectively in English" was held for faculty members to promote bilingual lectures.

Governance reform

○ **Establishment of Project Promotion Headquarters and Promotion Office**

The "Head office for Top Global University Project " was established under the direct control of the President, and the Executive Trustee/Vice President of the University, who is responsible for this project, was appointed as the head of this headquarters. Additionally, a "Office for Top Global University Project " was established under this headquarters. We have started the activities under the leadership of the President.

(From left: Mr. Takashima, the Head of Office;
Mr. Onishi, the President;
Mr. Inoue, the Head of Headquarters)

○ **Development of the University Charter, Onishi Plan and International Strategies**

We established the Charter of Toyohashi University of Technology, which serves as a guide for reform to a truly internationally recognized engineering university with global competeveness. We also declared five specific challenges to aim for a university of Technology with global compatibility (Onishi Plan), and international strategies to realize a multicultural and global compass.

○ **Training system toward international recognition**

Prior to the full-fledged implementation of the personnel exchange program for the faculty members and university staff with partner schools overseas, the university launched an English training program for 1 to 1.5 months and a FD/SD program for research/administrative work exchange, and dispatched one administrative official and four faculty members in FY 2015 to Queens College of the City University of New York.

Education reform

○ **Established the admission and education systems for "Global Technology Architects course"**

A large university-wide reform plan was established, including changes to student quotas, application qualifications and admission methods. Preparing for the acceptance of third year students from FY 2017, changes to the admission system were made. We have set a policy of bilingual lectures; established an outline for the educational system; and begun to design academic affairs this fiscal year.

○ **Enhancement of international recognition of the educational program and of international mobility of students**

We have started negotiations to expand the range of departments subject to double degree programs with Stuttgart University (Germany). In addition, we have begun concrete consultation on the creation of educational programs in collaboration with Universiti Sains Malaysia (USM) and other local educational institutions, with our campus in Malaysia as the base for coordination.

(Consultation on educational collaboration with the President and the Dean of USM)

■ University's own indicators and targets

1) Ratio of students living in school dormitories (indicator for campus globalization)
2) Ratio of students who have participated in overseas internship programs
3) Ratio of administrative staff who have experienced overseas training
4) Ratio of joint authorship of articles with researchers overseas

The university has worked on the following initiatives to enhance these indicators.

○ **Launched the construction of global boarding house for students**

Toyohashi Tech launched the construction of a new global boarding house. In addition, the university carried out a design competition for a new global boarding house with the aim of incorporating the excellent ideas of the university students, faculty members and university staff into the construction plan. This helped to raise a sense of participation and to spread the idea of campus globalization throughout the entire university.

(Design competition for Global Boarding House)

○ **Completed the system design for the problem-solving-based/long-term global internship program**

Students on the Global Technology Architects course will be required to participate in an internship program for about six months from the second semester of the fourth year of the undergraduate course to the first semester of the fist year of the master program at companies in non-native speaking countries. We developed a detailed program for the long-term problem-solving-based internship system. Further, we established the system that allows fourth-year students to take graduate school programs in advance so that they can acquire the credits for their classes to be held during their internship period.

○ **Launched training at Queens College**

We have newly established a training system for the faculty members and university staff at their partner university, Queens College (QC) of the City University of New York. In this program, participants stay at QC intensively for 1 to 1.5 months to undertake English language training and research/administrative training. Faculty members take the English training at QC to acquire methods to teach in English, as well as creating opportunities for joint research, etc. through exchange with research units in relevant fields in order to promote education/research activities in a global

(Training at QC, City University of New York)

setting. Administrative staff enhance global compatibility of their duties and the ability to perform international business through training by working at QC's administrative department, in addition to improving their command of English. This system was launched in FY 2015 and dispatched one administrative official and four faculty members. The university is planning to increase the number of participants in this program.

■ Featured initiatives based on the characteristics of the university

○ **Creation of a multicultural campus with the Multicultural Boarding House**

Majority of Toyohashi Tech students are technical college graduates and live in school dormitories. Taking advantage of this feature, the university is planning to newly build a Global Boarding House and to create a global campus with this boarding house. the university has established a working group within the office for Top Global University Project Promotion Office to study the management system, program design and support system so that this boarding house will function as an education-oriented dormitory.

○ **Reinforcement of partnership with ASEAN countries**

Over half of the international students at Toyohashi Tech are from ASEAN countries. This project aims at increasing the number of excellent international students leveraging the network that has been developed so far.

In FY 2014, We explained our Top Global University Project in nine countries (fifteen universities) to recruit international students. Additionally, we made it possible to do interviews for international applicants using a web-based system.

(Information session at Chung Ling High School in Malaysia)

Furthermore, for instance in Vietnam, we strengthened partnership with the Ho Chi Minh City University of Technology and Ho Chi Minh City University of Natural Resources and Environment, and established in FY 2015 the system to dispatch students from Toyohashi Tech there for an internship. In addition, we made inquiries and obtained agreement to accept students for overseas internships at five Vietnam-based companies. With these initiatives, the university has commenced preparation for the Global Technology Architect course.

■ Summary of the Initiatives Taken in FY 2014

This project aims at realizing a "Multicultural and Global Campus" with a high-level international compatibility based on the following three initiatives as pillars.

1. Creation of Global Technology Architects course
2. Construction of a Multicultural Boarding House, where students, faculty members and university staff with diverse values live together
3. Global capability upgrade of all human resources - Increasing and normalizing global rotation of all students, faculty members and university staff between Toyohashi Tech and the world

Each of the initiatives has progressed as planned. The university has already started the pilot project for bilingual lectures and the system to dispatch administrative and teaching staff to foreign countries.

3. FY2015 Progress

■ Common indicators and targets

Internationalization

○ Preparation for "Global Technology Architects Course"
We have developed a large part of the admission and education systems of this course to start accepting new third-year students in FY 2017 and new first-year students in FY 2018 for this course. To recruit capable Japanese and international students, we visited Japanese technical colleges and major partner universities mainly in ASEAN countries to explain about this course. We have started accepting applications for this course from technical college students this year and have held the entrance examinations as planned.

○ Bilingual (English and Japanese) lectures and curriculum development for improving language ability

We have prepared to set up bilingual lectures by defining the overall policy at the Educational Affairs committee and making implementation plans. We piloted bilingual lectures in more than 30 courses in FY 2015. All instructors will give bilingual lectures in at least one course, and 153 courses (13% of all courses) will be bilingualized in FY 2016. We have established the policy for language curriculum reform to improve language ability and have proceeded with the preparation for bilingual lectures starting in FY 2017.

(Example scene of bilingual lecture)

○ Preparation to construct the residential shared Global Boarding House
We accepted applications for a contractor for the Global Boarding House, and arrived at an agreement with a company which would effectively meet the specifications for the construction and realize the design concept created by the winner of an on-campus competition. As a first stage, we will design and construct 60 rooms by March FY 2016. We also have started discussing education programs and exchange programs to actively promote human resource development.

○ Support system to enhance global communication ability
We have reinforced an English learning support system for all members of this university. More specifically, the English learning counselors are available on campus between Mondays and Fridays, and English learning seminars are held regularly. Moreover, tablets have been provided to administrative staff for their English training through e-learning. TOEIC tests were administered to check their progress.

Governance reform

○ Establishing the Office for the promotion of the Top Global University Project
The TGU Project Promotion Office was launched to manage the overall project and facilitate on-campus communication, with mid-carrier academic staff being office members. Specific issues are discussed and concluded in each of the existing university committees, but this office is mainly responsible for identifying and discussing issues that do not fall into any of the existing committees or that require a cross-sectional approach. We have started discussing the realignment of university organizations and centers dealing with international affairs due to the termination of the TGU subsidy to come.

(Onishi Plan)

○ Development of the University Charter, Onishi Plan and International Strategies
Based on the University Charter, Onishi Plan, International Strategies, and our TGU project plan, which were established in FY 2015, we made the third-phase of the mid-term plan and have started to carry it out. We are trying to clarify the responsibility for this project and check its progress by incorporating the outcome indicators and goals into the mid-term plan.

○ Training system toward international recognition
We have started participating in FD/SD program for four to six weeks that aims at university staff's improvement of their English skills and have research/administrative work exchanges at Queens College of the City University of New York. Four faculty members and one administrative official were dispatched in FY 2015, and six faculty members and two administrative officials will be dispatched in FY 2016. We will also prepare for mid- to long-term personnel exchanges with overseas partner universities/schools.

Education reform

○ Admission and education system reform
A large university-wide reform plan was established, including changes to student quotas, application qualifications and admission methods. As preparation for the acceptance of third-year students from FY 2017, changes to the admission system were publicly announced. Related committees have agreed that bilingual lectures will be given university-wide earlier than was originally scheduled.

○ Enhancement of international recognition of the educational program and of international mobility of students
We have made a change to the educational system to correspond to the GPA and Course Numbering System, based on the plans made in the educational affairs committee. For new educational programs with overseas partner universities, we have concluded agreements with Northeastern University (China) and Mongolian University of Science and Technology (Mongolia). We are also looking for ways in which we develop collaborative education programs in collaboration with other overseas universities including Disted College and Universiti Sains Malaysia (USM).

(Visit by Disted College)

■ Specific indicators and targets

1) Ratio of students living in school dormitories (indicator for campus globalization).
2) Ratio of students who have participated in overseas internship programs.
3) Ratio of administrative staff who have experienced overseas training.
4) Ratio of joint authorship of academic articles with researchers overseas.

We have worked on the following initiatives to improve these indicators.

○ **Construction of the Global Boarding House**

We have determined the basic design of the residential shared Global Boarding House where students with multiple cultural backgrounds live together. The outsourced contractor will start constructing the boarding house in FY 2017. Adjacent to the existing student apartments which can accommodate 600 students, six accommodation buildings (each with capacity of 30 students, and 180 in total) and one common building will be constructed. Each unit has 5 bedrooms, 1 living & dining room, 1 kitchen and 1 bathroom, and will be shared by a mixture of 5 international and domestic students. With the commencement of Global Technology Architects Course in April FY 2017, students will start moving into the boarding house. The construction will be completed in FY 2018.

(Image of Global Boarding House)

○ **Promotion of Global Internship Program**

Because a six-month internship program will be offered to students of the Global Technology Architects Course, we discussed the implementation plan for this program at the related committees. In terms of practicality, we have agreed to develop the existing internship program to provide an internship opportunity for the final two months of their undergraduate course and their initial four months of the post-graduate course. Because we expect that we need many other internship places than the ones in Penang (Malaysia) and universities/research institutions, we are looking for new candidates from companies in Silicon Valley (the U.S.A). We have concentrated the responsibility for pioneering new internship programs on the internship committee to facilitate further development of the overseas internship.

○ **Promotion of overseas training of university staff members**

To promote the globalization of administrative staff, we have planned overseas SD programs to provide a greater number of staff with the opportunities to work overseas. This includes their intensive English learning and administrative exchanges with Queens College of the City University of New York, their involvement in administering the programs in Toyohashi University of Technology-Universiti Sains Malaysia Technology Collaboration Centre in Penang (Malaysia), and their administrative assistance to university overseas events including school advertisement and study-abroad seminars for prospective international students.

(Training at QC of the City University)

○ **Establishment of Organization for the Development of Innovative Research and Technology**

In addition to research support for increasing global academic performance, offered by Research Administration Center, Organization for the Development of Innovative Research and Technology was established in April 2016 with the aim of strategically promoting university research activities.

■ Featured initiatives based on the characteristics of the university

○ **Creation of a multi-cultural campus with the Global Boarding House**

The Global Boarding House offers a place for Japanese and international students to live together in a multi-cultural environment. We are discussing specific learning programs and their management at the TGU Project Promotion Office and the related committees so that all the students will benefit from these programs. This will lead to the realization of "Multi-cultural and Global Campus" stated in Onishi Plan.

○ **Reinforcement of partnership with ASEAN countries**

Over half of the international students of this university come from ASEAN countries. We hope that we welcome a large number of excellent students to our university utilizing the network that we have developed so far, including alumni associations of foreign students. We visited universities and high schools of twelve countries in FY 2015, to provide briefings about our university; for example, our work on globalization, the Global Technology Architect Course, and our new admission system. Ten students and four teachers of four high schools from three countries were invited to this university through Japan-Asia Youth Exchange Program in Science. Twenty-five students and nine teachers of nine high schools from five countries will be invited in FY 2016.

(Participants of Japan-Asia Youth Exchange of Science)

■ Summary of the Initiatives Completed in FY 2015

The present project aims to realize a "Multi-cultural and Global Campus" with a highly advanced global compatibility based on the following three initiatives as pillars.

1.Creation of the Global Technology Architects course

2.Construction of a Multi-cultural Boarding House, where students, faculty members and university staff with diverse values live together

3.Global capability upgrade of all human resources - Increasing and normalizing global rotation of all students, faculty members and university staff between Toyohashi Tech and the world

The original plan has been carried out with success, considering the following achievements: establishment of the new course, recruitment of students, implementation of admissions, and construction of the Global Boarding House. Bilingual lectures will be given university-wide ahead of the original plan. Future important tasks include developing specific programs for the Global Technology Architects course and planning specific programs at the Global Boarding House. We also acknowledge the importance of checking the overall outcome indicators and goals of this project and making administrative systems more effective and efficient to realize the true reform of the university.

4. FY2016 Progress

■ Common indicators and targets

Internationalization

○ **Recruitment and entrance examination of "Global Technology Architects Course (GAC)" third-year students**

The "Global Technology Architects Course (GAC)" is the backbone of this project, and a total of 41 third-year students (including 10 international students) are scheduled to join the April 2017 enrollment as the first GAC students. We selected 35 students (9 international students) through the entrance examination conducted in May and June 2016, and 6 students (including 1 international student) through the "transfer course system from general course to GAC" which we established in FY 2016. We plan to conduct the first-year GAC students' entrance examinations, which are mainly targeting international students, from FY 2017. In order to disseminate GAC further and acquire capable international and Japanese students both, we attended education fairs, visited schools, and distributed posters and informative materials aimed at ASEAN major countries, priority high schools, and Japanese technical colleges.

○ **Bilingual (English and Japanese) lectures and curriculum development for improving language ability**

Based on the bilingual lecture policy of the university, in FY 2016 all the instructors provided more than one bilingual lecture each, and as a result, 139 courses (25% of all courses excluding languages) were bilingualized in the undergraduate course. In preparation for the acceptance of GAC students, we also established an educational system to improve language skills and global abilities, and organized the curriculum and timetable.

(Example scene of bilingual lecture)

○ **First stage construction of the residential shared Global Boarding House**

Construction of two student accommodation buildings and a common building started in October 2016, and was completed in March 2017. After an on-campus competition and discussion, "TUT Global House" was decided on as the name of the new accommodation. We established an operation system for the accommodation, publicly recruited a housemaster, discussed GAC's education programs as regular extracurricular education at the TGU Project Promotion Office and related committees as a preparation for students to move in in April 2017.

○ **Support system to enhance global communication ability**

We continued the English learning counselor system available on campus between Mondays and Fridays, because the occupancy rate was high and the lectures were well received. To strengthen the language learning support system for students, faculty and staff, we also introduced a trial Japanese learning counselor system to international students. Furthermore, we introduced a new online English conversation training for administrative staff who are prospective candidates for future mid- to long-term overseas dispatch. In order to improve our global learning environment, we renovated part of the first floor into a global lecture area along with a renovation of the University library.

Governance reform

○ **Organizing the external evaluation committee**

We held an External Evaluation Committee in March 2017, and explained the progress situation from FY2014. We received valuable advice on various aspects to promote the project, such as bilingual lectures, regional exchange activities for international students, achievement of various numerical targets.

○ **Implementation of the Third Phase Mid-Term Plan**

We have started the 3rd mid-term plan based on University Charter, "Onishi Plan" (2016), International Strategies, and our TGU project plan. By placing TGU's performance indicators and targets in the mid-term plan, we are clarifying responsibilities and the status of implementation.

(Onishi Plan)

○ **Tenure track system implementation**

We continued our efforts to increase the number of tenure teachers by establishing our own tenure track system, and in FY2016 we adopted four tenure teachers.

○ **Training system toward international recognition**

We have participated in an FD/SD program for four to six weeks that aims at improving university staff English skill and research/administrative work exchanges at Queens College of the City University of New York since FY 2015. Six faculty members and two administrative officials were dispatched in FY 2016 and the same number will be dispatched in FY2017. While we will continue the effort in the future, we will also prepare for mid- to long-term personnel exchanges with overseas partner universities/schools.

Education reform

○ **Admission and education system reform**

Entrance examinations, which were revised drastically along with the introduction of the GAC entrance examination, were implemented. We will evaluate their results through related committees and commit to continuous improvement.

As bilingual lectures were expanded to the wider university earlier than originally scheduled, we conducted specific studies such as lecture methods and language ability training curriculum for students to deal with, and created a curriculum and timetable formation including pre-admission education.

○ **Enhancement of international mobility of students**

We recognized that the collaborative education programs with overseas partner universities are effective for enhancing the international mobility of students and continuously increasing the number of international students. In addition to the existing 5 undergraduate twining programs, 3 master's twining programs, and 2 master's double degree programs, we concluded twining program agreements with DISTED College in Penang, Malaysia. We have commenced solid discussions on the expansion of double degree program with Stuttgart University (Germany) and establishing a twinning program with Universiti Sains Malaysia (USM), and we also continue to look for ways in which we develop collaborative education programs in collaboration with other overseas universities.

(Signing ceremony with Disted College)

■ Specific indicators and targets

1) Ratio of students living in school dormitories (indicator for campus globalization).
2) Ratio of students who have participated in overseas internship programs.
3) Ratio of administrative staff who have experienced overseas training.
4) Ratio of joint authorship of academic articles with researchers overseas.

We have worked on the following initiatives to improve these indicators.

○ **Construction of "TUT Global House" (Global Boarding House)**

First stage construction of the Global Boarding House was completed in March 2017. Two accommodation buildings (each with capacity of 30 students) and a common building were built, and construction will continue along with the GAC students' new enrollments until a total of six accommodation buildings (total capacity of 180) are built by the end of FY 2018. Each unit has 5 bedrooms, 1 living & dining room, 1 kitchen and 1 bathroom, and is shared by a mixture of 5 international and domestic students. The ratio of international and domestic students will be 50% each in the future. 41 GAC students and 19 general course students started to live there from April 2017, 11 of them are international students and 5 are female students.

(Global Boarding House "TUT Global House")

○ **Promotion of Global Internship Program**

We made an overseas internship working group under the internship committee to look for new candidate companies overseas and to increase the number of dispatched students to go abroad. This will enable us to deal with the GAC students' internship program, which requires 2 to 4 months overseas training for Japanese students (domestic training to international students). We started to look for new candidates in Silicon Valley (the U.S.A) and attempted to dispatch a greater number of students to existing companies, in addition to looking for new candidate companies in Penang (Malaysia) and overseas universities/research institutions. 58 students interned overseas in FY 2016, which greatly increased from 32 in FY 2015, which was the result of an early overseas internship briefing session, ongoing support for candidates and faculty members, and scholarships.

○ **Promotion of overseas training of university staff members**

To promote the globalization of administrative staff, we implemented overseas SD programs as planned, to provide a greater number of staff the opportunity to work overseas. This includes their involvement in administering the programs in Toyohashi University of Technology - Universiti Sains Malaysia Technology Collaboration Centre in Penang (Malaysia), their intensive English learning and administrative exchanges with Queens College of the City University of New York, and their administrative assistance to overseas university events including school advertisement and study-abroad seminars for prospective international students.

(Participants of ASEAN University Presidents Forum)

○ **Establishment of Organization for the Development of Innovative Research and Technology**

We established joint laboratories with the California Institute of Technology and Massachusetts Institute of Technology at the "Organization for the Development of Innovative Research and Technology" which was newly established in April 2016 by reorganizing existing laboratories and research centers. In addition, we have been developing a strong international collaborative research network through the "Program for advancing strategic international networks to accelerate the circulation of talented researchers", starting collaborative projects with four universities in Europe and the United States.

■ Featured initiatives based on the characteristics of the university

○ **Creation of a multi-cultural campus with the Global Boarding House**

The Global Boarding House offers a place for Japanese and international students to live together in a multi-cultural environment. Its educational and exchange programs will spread from the existing student dormitories to the regional area to realize the "Multi-cultural and Global Campus" as stated in the "Onishi Plan". For preparing the Global Boarding House opening in FY 2017, we established an operation system managed under the cooperation of the housemaster and created frameworks for education programs which improve GAC students' global abilities through discussion at the TGU Project Promotion Office and related committees.

○ **Reinforcement of partnership with ASEAN countries**

More than half of our international students are from ASEAN countries with rapidly growing economies such as Malaysia, Indonesia and Vietnam. Promoting a strengthening of the international alumni association organization as a means of strengthening ties with these countries, we organized new branches in two countries in FY2016 and have now established overseas branches in a total of eight countries. We visited universities and high schools in 11 Asian countries, and introduced the university, our globalization strategy, and the international programs. 22 students and nine teachers of strategic high schools from five countries were invited to our university through the Japan-Asia Youth Exchange Program in Science with a particular aim of acquiring excellent GAC first-year students. We will continue to carry out this activity for further acquisition and expansion of examinee

(Participants of High school students invitation program)

■ Summary of the Initiatives Completed in FY 2016

The present project aims to realize a "Multi-cultural and Global Campus" with a highly advanced global compatibility based on the following three initiatives as pillars.

1.Creation of the Global Technology Architects course
2.Construction of a Multi-cultural Boarding House, where students, faculty members and university staff with diverse values live together
3.Global capability upgrade of all human resources - Increasing and normalizing global rotation of all students, faculty members and university staff between Toyohashi Tech and the world

The original plan has been implemented with success, considering the following achievements: establishment of the new course, recruitment of students, implementation of admissions, construction of the Global Boarding House, establishment of education program. Bilingual lectures were given university-wide ahead of the original plan. We expect that the problem of everyday life, which occurs by actually accepting GAC students, becomes a priority issue from FY 2017. We also acknowledge the importance of confirming the overall outcome indicators and goals of this project and making administrative systems more effective and efficient to realize the true reform of the university.

5. FY2017 Progress

■ Common indicators and targets

Internationalization

○ **Recruitment and first entrance examination of GAC first-year students**

A group of 10 first-year students (all international students) were selected and enrolled in the Global Technology Architects Course (GAC). This is the very first group of first year students to be enrolled in the course, which is the backbone of the university's overall globalization strategy. For the 2018 enrollment a total of 55 students (45 third year and 10 first year); of which 23 are from countries other than Japan, joined the course in April.

In order to acquire capable students, we continuously engaged in recruiting activities to ASEAN major countries, selected high schools, and Japanese technical colleges, as well as introduced a new initiative of holding sessions at domestic Japanese language schools for first year students.

○ **Bilingual (English and Japanese) lectures and curriculum development for improving language ability**

207 courses (39% of all courses excluding languages) were bilingualized in the undergraduate course, in line with university's bilingual lecture policy.
In preparation for the acceptance of FY2018 first-year GAC students, enhancements to the curriculum were developed such as increasing the number of Japanese language courses and conducting first semester courses in English.

(Bilingual lecture process)

○ **Students started to live in the unique shared-house style of student Accommodation "TUT Global House"**

A total of 60 students, 41 GAC students and 19 general course students who readily "act globally" started to live in the TUT Global House. There, GAC students hosted social gatherings with the university president, met with local industry and engaged in dialogue, as a part of "Living & Learning program" which is GAC's certification requirement. Two new buildings have been built, providing four buildings altogether (capacity of 120 students).

○ **Support system to enhance global communication ability**

To strengthen the language learning support system for students, faculty and staff, we maintained the campus English learning counselor system available on weekdays, as well as introduced one in Japanese for international students. We also continued the e-learning English and online English conversation training for administrative staff who are prospective candidates for future mid- to long-term overseas postings.

Governance reform

○ **Organizing the External Evaluation Committee**

At the External Evaluation Committee in March 2018, we explained the progress situation from FY2014 with the result of an intermediate evaluation, and received valuable advice on various aspects to promote the project, such as regional exchange activities for international students, industrial training internships, and language education.

(Onishi Plan)

○ **Implementation of the Third Phase Mid-Term Plan**

We implemented the 3rd mid-term plan based on University Charter, "Onishi Plan" (2017), International Strategies, and our TGU project plan. By placing TGU's performance indicators and targets in the mid-term plan, we are clarifying responsibilities and the status of implementation.

○ **Restructure of IGNITE (Institute for Global Network Innovation in Technology Education)**

In order to strengthen and enhance global projects, we restructured three related international organizations of IGNITE, making it possible to carry out cross-sectional measures.

○ **Training system toward international recognition**

We participated in a Faculty Development /Staff Development program for four to six weeks that aimed to improve university staff English skill and foster research/administrative work exchanges at Queens College of the City University of New York since FY 2015. Six faculty members and two administrative staff were dispatched this year. We also placed a staff member at the University of Eastern Finland for a one month personnel exchange.

Education reform

○ **Education system reform**

As bilingual lectures were expanded to the wider university earlier than originally scheduled, we strove to improve lecture contents and methods by undertaking lecture surveys and the collection of faculty and staff observations of highly evaluated lecturers

○ **Enhancement of international mobility of students**

We recognize that collaborative education programs with overseas partner universities are effective for enhancing the international mobility of students and attracting a greater number of international students. We concluded double degree program agreements with the University of Eastern Finland to enrich the master programs, as well as further discussed the expansion of the double degree program with Stuttgart University (Germany). We also promoted the expansion of the twinning program and development of collaborative education programs with other overseas universities.

(Meeting at the University of Eastern Finland)

■ Specific indicators and targets

1) Ratio of students (including international students) living on campus students accommodations.
2) Ratio of students who have participated in overseas internship programs.
3) Ratio of administrative staff who have experienced overseas training.
4) Ratio of joint authorship of academic papers with overseas researchers.
We worked on the following initiatives to improve these indicators.

○ **Students started to live in "TUT Global House"**
A total of 60 students (11 international, 5 female students) started to live in the TUT Global House. Both international and Japanese students share a mixed cultural unit (each unit has 5 bedrooms, 1 living & dining room, 1 kitchen and 1 bathroom) where they share issues and develop solutions for day to day living challenges, as well as planning, managing and participating in various events.

(TUT Global House)

○ **Promotion of Global Internship Program**
We sought new candidates in Silicon Valley (the U.S.A) and Penang (Malaysia), and attempted to place a greater number of students at existing companies to deal with the increasing need due to the GAC students' internship program, which requires 2 months overseas training for Japanese students (domestic training to international students) in their undergraduate 4th year. According to the result of an early overseas internship briefing session, ongoing support for candidates and faculty members, and scholarships, a total of 56 students interned overseas.

○ **Promotion of overseas training of university staff members**
To promote the globalization of administrative staff, we implemented overseas Staff Development (SD) programs where a greater number of staff could experience work overseas. There were SD programs at Queens College of the City University of New York for several weeks, at the University of Eastern Finland for a month, and at Universiti Sains Malaysia Technology Collaboration Centre in Penang (Malaysia) for approximately 1 week.

(University introduction presentation during SD program)

○ **Approach to increase publication of research papers**
In order to improve the number of publications and quality of research papers, we implemented a number of measures, such as "adding one more research paper activity", paper presentation expenses support, and English press releases utilizing "EurekAlert!". In addition, we have been developing a strong international collaborative research network with four overseas universities.

■ Featured initiatives based on the characteristics of the university

○ **Creation of a multi-cultural campus with the TUT Global House**
TUT Global House, where GAC students live, offers a place for Japanese and international students to live together in a multi-cultural environment. To spread its multi-cultural atmosphere, GAC students participated in University multi-cultural interactive events, and hosted social gatherings with local companies where opinions could be exchanged. The House Master, TGU Project Promotion Office, and related faculty and staff worked together to support these events so that GAC students can act on their own initiative.

○ **Reinforcement of partnership with ASEAN countries**
To promote the acquisition of excellent students from ASEAN countries with rapidly growing economies (where more than half of our international students come from), we visited universities and high schools in six countries, and introduced the university. 21 students and nine teachers from selected high schools from five countries were invited to our university to attract first-year GAC students.

(Participants of High school students invitation program)

■ Summary of the Initiatives Completed in FY 2017

The present project aims to realize a "Multi-cultural and Global Campus" with a highly advanced global compatibility based on the following three initiatives as pillars.
1.Accept the first batch of students, open the "TUT Global House" and start the "Global Technology Architects" education program
2.Implementation of "Living & Learning program" in the TUT Global House where Japanese and international students with diverse values live together
3.Global capability upgrade of all human resources - Increasing and normalizing global rotation of all students, faculty members and university staff between TUT and the world
The original plan has been implemented with success, highlighted by the following achievements: Commenced the enrollments of GAC students and started TUT Global House living as planned. Students in the TUT Global House proactively presented multi-cultural interactive events which helped to expand students' interactive opportunities university wide. Furthermore, with a greater number of staff experiencing work overseas, globalization activity for the entire campus has been successful.