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 competitiveness and sustainable economic growth of our nation’s industries in a profound way.
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 operation. 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.

- **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**

- **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.

- **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 competitiveness. 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 F/S 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**

- **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.
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.

- **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 first 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 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.

    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.

- **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.

- **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).
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.

- **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.

- **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.

- **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 education 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.

- 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.

- 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 twinning programs, 3 master's twinning programs, and 2 master's double degree programs, we concluded twinning 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.
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.

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 participated 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 overseas 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.

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.

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.

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.

- 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.

- 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.
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.

- **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.

- **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.

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.
6. FY2018 Progress

- **Common indicators and targets**

  **Internationalization**
  - Accepting students into the "Global Technology Architects Course" (GAC)
  
  This is the second year since the launch of the GAC, which serves as the backbone of this project, and we have now started to accept first-year GAC students. In FY2018, a total of 97 students were enrolled in the GAC, comprising 10 first-year students, 47 third-year students (including two students transferred from the general course) and 40 fourth-year students.
  
  GAC students take subjects in a curriculum that focuses on strengthening language skills and developing world-class interpersonal capabilities. They reside in a shared-house style of student accommodation, and participate in "Living & Learning program". Only a short amount of time has passed since the start of the course, and so we aim to refine the GAC by periodically checking how the students are progressing as we evaluate and review course contents and consider plans for improvement.

  - Implementing "Living & Learning program" at the TUT Global House
  
  The housemaster and resident assistants work together to manage the "TUT Global House," a shared-house style of student accommodation where Japanese and international GAC students live together. The Global House Student Committee (GHSC) was also newly organized to plan and implement activities as well as to support activities held voluntarily by the students living in the Global House. A variety of activities were organized by students under the leadership of the GHSC, with a focus on initiatives for cross-cultural communication and globalization. Examples of the activities include events to promote exchange between Global House residents, other TUT students, local residents and local companies.

  - Developing bilingual (English and Japanese) lectures and a curriculum for improving language ability
  
  We have continued to make efforts toward developing English-Japanese bilingual lectures across the entire university ahead of the schedule that was created during the planning stage. We have now bilingualized 231 undergraduate courses (approximately 44% of all undergraduate courses excluding language lectures). Also, following the start of the university accepting first-year international GAC students, we have improved the curriculum by increasing the number of Japanese language courses as well as offering first semester courses in English for first-year students, to accommodate the requirements of international students with varying levels of linguistic ability in Japanese.

  - Support system to enhance global communication ability

  With a view to enhancing students' language skills, we have continued to implement a system for students to receive consultation from advisers regarding English language studies as well as an educational support system using e-learning and other materials, in addition to initiatives to understand students' English ability through TOEIC examinations. We have also recently assigned advisers for learning Japanese in order to support international students as they study the language.

  We conducted a short-term intensive program to learn English language in the United States for faculty members in order to strengthen their language skills. In addition, we used e-learning materials and held English conversation training for administrative staff to improve their English language proficiency.

- **Governance reform**

  - Implementation of the Third Phase Mid-Term Plan
  
  We implemented the 3rd mid-term plan based on the University Charter, "Onishi Plan" (2018), International Strategies, and our TGU Project Plan. By designing the mid-term plan to include TGU's performance indicators and targets, we are clarifying responsibilities and the status of implementation.

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

  In order to further promote globalization in TUT, we reorganized IGNITE (originally established in 2013) into the International Cooperation Center for Engineering Education Development (ICCEED), the Core of International Relations (CIR), the Core of International Education (CIE) and the Office for Top Global University (TGU) Project. In this initiative, we decided to reorganize instead of simply combining our existing centers, allowing for the organizations as a whole to conduct important activities and optimize resources in order to engage in a variety of projects to create a multicultural, global campus and to promote globalization at TUT.

  - Training system toward international recognition

  We have continued to carry out Faculty Development (FD) and Staff Development (SD) programs where we dispatch faculty and staff members to Queens College of the City University of New York for about six weeks. This program aims to improve the English skills of our staff through participation in short-term intensive language courses, as well as to promote exchange between research and administrative personnel. Five faculty members and two administrative staff members were dispatched in FY2018.

  We also accepted faculty members from Universiti Sains Malaysia and from New Mongol Academy and organized events for exchange with TUT faculty members, as part of a personnel exchange program with overseas partner schools.

- **Education reform**

  - Education system reform

  English-Japanese bilingual lectures were evaluated through class surveys, which collected observations from students and faculty members for the purpose of improving lecture contents and methods. The Educational Affairs Committee has been striving to promote and roll out English-Japanese bilingual lectures across the university.

  - Enhancement of international mobility of students

  We have promoted the implementation of collaborative education programs (the twinning program and the double degree program), such as through launching a new double degree program with the University of Eastern Finland, with aims to enhance the international mobility of students and to attract a greater number of international students. We are also continuing with discussions on the expansion of courses targeted by existing programs and other related matters.
Specific indicators and targets

We have set the following specific indicators in this project:
1) Ratio of students (including international students) living in students' accommodation on campus
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 have worked on the following initiatives to improve results in these indicators.

- Completion of the "TUT Global House"
  The completion of two new buildings at the end of FY2018 marked the end of construction work for the TUT Global House, currently featuring a total of six buildings (36 units accommodating 180 people). The second group of GAC students moved into the Global House in April 2018, and a total of 115 students began conducting activities at the house. Japanese and international students live together as they share issues and develop solutions for challenges in day to day living and cross-cultural exchange, in addition to planning and hosting various events.

- Promotion of Global Internship Program
  In order to encourage students to participate in overseas internship programs, we held a briefing session in April 2018 for all interested students including those enrolled in the eligible year of their course. The On-the-Job Training (OJT) Committee took the lead in continued follow-up support activities after the briefing session. As a result, we dispatched 72 students in FY2018, which was 1.4 times higher than in FY2017. We also enhanced our financial support system to reduce students' burden. Faculty members continued in their efforts from the previous fiscal year as they visited overseas institutions to develop and expand the range of organizations that will accept students dispatched from TUT.

- Promotion of overseas training of university staff members
  With a view to promoting the globalization of our administrative staff, we have implemented a short-term intensive course for learning English language at Queens College of the City University of New York, as well as a global staff development program utilizing our education base in Malaysia. The university will continue to offer these programs to increase opportunities for the administrative staff to gain practical work experience in overseas countries.

- 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 including "adding one more research paper activities," paper presentation expenses support, and English press releases utilizing our international information relay platform "EurekAlert!" In addition, we have been promoting international joint research through a project to foster promising researchers who will succeed on the international stage, and have continued to develop a strong network with four universities in Europe and the USA in addition to dispatching young faculty members.

Featured initiatives based on the characteristics of the university

- Creation of a multi-cultural campus with the TUT Global House
  The TUT Global House is a shared-house style of student accommodation for both Japanese and international GAC students, and also offers opportunities for cross-cultural experiences for any general course students looking to achieve future success in a global society. With an aim to promote a wide variety of interactive exchanges on campus, GAC students operate and participate in TUT EXPO, the university’s international exchange event, and the Global House Student Committee (GHSC) takes the lead in planning and implementing various exchange events including those involving local companies.

- Reinforcement of partnership with ASEAN countries
  More than half of the international students at TUT are from ASEAN and other Asian countries enjoying rapid economic growth such as Malaysia, Indonesia, Mongolia and Vietnam. To promote the continued acquisition of excellent students from these regions, we visited universities, high schools, and other institutions and held briefing sessions to describe TUT and to offer information on our globalization strategies as well as about studying in Japan. With the objective of acquiring excellent GAC students, we invited students and teachers from Jit Sin High School in Malaysia and from Japanese-style technical colleges in Mongolia as well as the New Mongol Institute of Technology (NMIT) to introduce them to TUT, and conducted campus tours as well as exchanges and other events with TUT students.

Summary of the Initiatives Completed in FY 2018

This project aims to realize a "Multi-cultural and Global Campus" with a highly advanced global compatibility mainly through undertaking the following three initiatives as pillars:
1. Accept students into the "Global Technology Architects Course" (GAC)
2. Implementation of the "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 - Accelerating and stabilizing the global circulation of all students, faculty members and university staff between TUT and the world

In the second year of accepting GAC students, we welcomed the first batch of first-year students and continued to enroll third-year transfer students. The Global House Student Committee (GHSC) was established at the TUT Global House where GAC students live, and with this organization we worked on "Living & Learning program" including initiatives to promote further voluntary activities conducted proactively among students.

We have also carried out two- to six-week global staff development and language study programs in order to promote the globalization of administrative staff, and we have accepted faculty members from overseas partner universities and conducted exchange programs. Through these efforts among others, we have strived to promote university-wide globalization.
7. FY2019 Progress

- Common indicators and targets

**Internationalization**
- **Acceptance of students into the “Global Technology Architects Course” (GAC)**
  This is the third year since the launch of the GAC, which serves as the backbone of the Top Global University (TGU) project. In FY2019, a total of 128 students were enrolled in the GAC, comprising eight first-year students, 10 second-year students, 33 third-year students and 47 fourth-year students of undergraduate programs along with 30 first-year master’s degree students. The graduates of the technical college in Mongolia, which is the first Japanese-style technical college in a foreign country, took the GAC third-year entrance examination. Five of them passed the examination and were enrolled in TUT starting in FY2020. In addition to the general curriculum, GAC students are required to take courses to enhance their language skills and global knowledge. Furthermore, they reside in shared-house style student accommodation called the TUT Global House, and participate in the Living and Learning program. While monitoring the students’ situation, we evaluate the program contents and consider suggestions for improvement from time to time, aiming at enriching the course.

- **Implementation of the “Living & Learning program” at the TUT Global House**
  At the “TUT Global House,” a type of shared-house style student accommodation where Japanese and international GAC students live together, activities focusing on globalization, intercultural communication, etc., as well as exchange events outside the university, etc., were planned and implemented mainly by the housemaster and the Global House Student Committee (GHSC), which is the representative organization of GAC students living in the Global House. Looking back on the results over the past three years, we started to coordinate and review the programs for the future.

- **Development of bilingual (English and Japanese) lectures and a curriculum for improving language ability**
  English-Japanese bilingual lectures have been promoted across the entire university, ahead of the original schedule. There are now 366 bilingually taught courses, (approximately 72% of all undergraduate courses, excluding language classes). Moreover, a restructured language curriculum has been implemented and is being continuously improved, in order to accommodate Japanese students’ English abilities as well as international students’ Japanese abilities, of which there is considerable variation, especially at the start of GAC.

- **Support system to enhance global communication ability**
  In addition to conducting TOEIC examinations simultaneously targeting all students to grasp their English ability, we have continued to implement support systems to enhance students’ language ability, such as a tutor system for English-Japanese learning, as well as well supplying/utilizing e-learning materials. We have been conducting a short-term intensive program each year to dispatch our faculty and administrative staff members to the universities in the United States for four to six weeks in order to strengthen their English skills. In addition, we continuously provide our administrative staff with the materials and communication environment for e-learning and hold English conversation training in order to improve their global communication abilities.

- **Sharing of the achievements and challenges to date with people outside the university**
  On November 3rd, we hosted TGU Symposium to share the achievement and challenges of TUT’s efforts so far with other universities, including TGU-designated universities, and the local community. The conference consisted of: (1) Open panel discussion - “Toyohashi University of Technology’s challenge to achieve globalization”; and (2) HOUSE (Housing Officers for University Student Education) Meeting.

**Governance reform**

- **Holding of the External Evaluation Committee**
  We held an external evaluation committee meeting in June, where we made a progress report on the project and received advice on bilingual classes, overseas internship programs and management of the shared-house style student accommodation.

- **Implementation of the Third Phase Mid-Term Plan**
  We implemented the FY2019 Plan based on the 3rd mid-term plan, which was mapped out in line with the University Charter, the “Onishi Plan” International Strategies, and our TGU Project Plan. TGU’s performance indicators and targets were included in the mid-term plan to clarify responsibilities and the status of implementation.

- **Training system toward international recognition**
  We have continued to carry out Faculty Development (FD) and Staff Development (SD) programs wherein we dispatch our faculty and staff members to Queens College at the City University of New York for six weeks. This program aims to improve the English skills of our staff through participation in the short-term intensive language courses, as well as to promote exchange between research and administrative personnel. In FY2019, six faculty members and two administrative staff members were dispatched. In addition, as part of the personnel exchange program with our overseas partner universities, we accepted administrative staff from the University of Eastern Finland for one month to enhance understanding about international operations and to interact with administrative staff.

**Education reform**

- **Education system reform**
  In order to improve the content and methods of the English-Japanese bilingual lectures, an evaluation was conducted through class surveys with students and faculty members, and the Educational Affairs Committee has been striving to establish firmly and enhance the bilingual lectures across the university. Furthermore, the “Global Leaders’ Seminar” (a four-day intensive course) was developed in collaboration with foreign global companies and was launched as a new graduate school course exclusively for GAC students, who rated it highly.

- **Enhancement of international mobility of students**
  In an effort to increase the number of full-time international students through the collaborative education programs with overseas partner universities (the twinning program, the double degree program, etc.), in addition to promoting existing programs, we are working to launch new international education programs with four universities, including the University of Eastern Finland (Finland), KU Leuven (Belgium), and Saint-Étienne Jean Monnet University (France). The increase in the number of Japanese students studying abroad or having overseas experiences is progressing slowly compared to that of international students at TUT. Under such circumstances, TUT implemented the “HABATAKE! TUT Overseas Training Support Campaign”, using our own financial resources to significantly expand the number of Japanese students going abroad. Of the 113 applicants, 76 were selected to receive support for travel expenses. (The number of students who actually went abroad was 34 due to the COVID-19 outbreak.)
Specific indicators and targets
We have set the following specific indicators in this project:
1) Ratio of students (including international students) living in student accommodation on campus
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 have worked on the following initiatives to improve results in these indicators.

- **Operation of the “TUT Global House”**
The construction of all of the six buildings of the TUT Global House, a type of shared-house style student accommodation, was completed at the end of FY2018. In FY2019, a total of 163 students, including GAC and regular course students, lived together in this facility. At the TUT Global House, Japanese students and international students live together and voluntarily work on cross-cultural exchange, the sharing and solving of problems arising from group life, and the planning and hosting of various events. In addition to the housemaster, a dedicated program coordinator was assigned to respond to the increased number of GAC students living in the Global House and to enhance the Living and Learning program.

- **Increase in the number of students to be dispatched through the Global Internship Program**
In order to increase the students participating in the overseas internship programs, we hold a briefing session in April at the start of each fiscal year, for all interested students including those enrolled in the eligible year of their course. Continuous follow-up support after the briefing session is provided mainly by the On-the-Job Training (OJT) Committee. As a result, we dispatched 77 students overseas for two months in FY2019, up 10 percent from the year earlier. In addition, we are improving our financial support to reduce students’ burden.

- **Promotion of overseas training for university staff members**
With a view to promoting the globalization of our administrative staff, we have implemented a short-term intensive course for learning English language at Queens College at the City University of New York, as well as a global staff development program utilizing our education base in Malaysia. TUT will continue to offer these programs to increase the number of administrative staff with practical work experience in overseas countries.

- **Initiatives to increase publication of research papers**
Mainly through the Research Administration Center, we provide support for researchers including analysis of research capabilities/ strategy planning; financial support for paper publication and presentation; proofreading of English papers; and press releases in English utilizing our international information relay platform "EurekAlert!”. In addition, we have been making efforts to increase international joint research through a project to foster promising researchers who we believe will succeed on a global stage, and have continued to develop a strong network with four universities in Europe and the USA, in addition to dispatching young faculty members.

Featured initiatives based on the characteristics of the university

- **Creation of a multi-cultural campus with the TUT Global House**
All GAC undergraduate students are required to live in the TUT Global House. In addition, regular course students hoping to play an active role in global society can live in the house and experience group life. We are also providing guidance and support to GAC students who operate the TUT EXPO, which is our university’s international exchange event, as well as various exchange events led by the Global House Student Committee (GHSC) so that these events can be carried out involving the entire campus and extending to include the local community and companies.

- **Reinforcement of partnership with ASEAN countries**
More than half of the international students at TUT are from ASEAN and other Asian countries enjoying rapid economic growth, such as Malaysia, Indonesia, Mongolia and Vietnam. To acquire excellent students from these regions on a continuous basis, we strategically selected and visited universities, high schools and other institutions in this regions and held briefing sessions on TUT, our globalization strategies and studying in Japan. Additionally, with the objective of acquiring excellent GAC students, we have continuously invited students, teachers, etc. from Jit Sin High School in Malaysia and Princess Chulabhorn Science in Thailand to TUT to introduce our university, and to host the laboratories and interact with our students at TUT.

Summary of the Initiatives Completed in FY 2019
This project aims to realize a “Multi-cultural and Global Campus” enjoying international recognition, mainly through the undertaking of the following three initiatives as its pillars:

1. Acceptance of students into the “Global Technology Architects Course” (GAC)
2. Implementation of the “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 - Accelerating and stabilizing the global circulation of all students, faculty members and university staff between TUT and the world

In the third year since the start of accepting GAC students, we continued to welcome first-year undergraduate students and third-year transfer students. At the TUT Global House where GAC students live, the Global House Student Committee (GHSC) is actively engaged in activities for the Living and Learning program and promotes voluntary student activities.

We have also carried out two- to six-week global staff development and language study programs in order to promote the globalization of administrative staff. Additionally, we have accepted faculty members from overseas partner universities and conducted exchange programs. Through these efforts among others, we have strived to promote university-wide globalization.
8. FY2020 Progress

Common indicators and targets

Internationalization

☐ Acceptance of students into the "Global Technology Architects Course" (GAC)
Cohorts of students progressed through the years of the GAC, which serves as the backbone of the Top Global University (TGU) project, with students enrolled in all years of the undergraduate program and the graduate school master's program and, in March 2021, 15 students received accreditation as first cohort graduates (master's graduates) of the GAC. In FY2020, a total of 164 students were enrolled in the GAC, comprising 13 first-year students, 8 second-year students, 47 third-year students, and 35 fourth-year students of the master's degree program. While foreign students who were not permitted to enter Japan at the beginning of the fiscal year due to the COVID-19 pandemic also continued with lessons and exchange activities online, all students managed to come to Japan by November. While completing the second TGU interim evaluation and also using feedback from external evaluation committee members as a reference, we plan to hold in-depth discussions with relevant departments and committees to evaluate the program and develop a plan of action to run the TGU project ourselves once the TGU support period comes to an end.

☐ Development of bilingual (English and Japanese) lectures and a curriculum for improving language ability
English-Japanese bilingual lectures have been promoted across the entire university, ahead of the original schedule. There are now 394 bilingualized undergraduate courses (approximately 73.6% of all undergraduate courses, excluding language classes). Since the acquisition of English skills equivalent to a TOEIC score of 730, which is one of the requirements for completing the GAC, was a major challenge for first cohort graduates, we offered online TOEIC courses for all GAC Japanese students during the spring break.

☐ Implementation of the "Living & Learning program" at the TUT Global House
At the TUT Global House, a type of shared-house style student accommodation where Japanese and international GAC students live together, we reorganized the framework of the GAC Living & Learning program, which supports the development of global human resources, in FY2019 based on the past three years operations and began implementing the program based on this new framework. We also developed documents such as a rubric of the skills required of GAC students, a matrix of the skills to be mastered in each program, and a guide for residents living in Global House, and a GAC program guide. Despite continuing to recruit for a new housemaster on the expiration of the term of office of the first housemaster, we were unable to find the adequate person and two well-experienced members of staff from our International Affairs Division took the lead in running the program. We continued to recruit, revising the position of housemaster as a highly-skilled professional, and as a result, we managed to hire the adequate person, who took up the post in April 2021.

☐ Support system to enhance global communication ability
In addition to conducting TOEIC IP examinations simultaneously targeting all students to grasp their scores, the university has continued to implement support systems to enhance students’ language ability at its own expense, such as a tutor system for English/Japanese learning students, as well as supplying e-learning materials.

Governance reform

☐ Holding of the External Evaluation Committee
We held an external evaluation committee meeting in March, where we explained mainly the status of project implementation and the results of the interim evaluation for FY2020. We obtained advice for the continued development of the project, including visualizing results not solely based on of indicators and actively interacting with and gaining the support of local communities.

☐ Implementation of the Third Phase Mid-Term Plan
We once again shared the history and progress of the TGU project with the new President and executives who assumed office this fiscal year and conducted activities in line with the FY2020 Plan based on the 3rd Mid-Term Plan. Based on the common indicators and targets of the TGU project, the interim evaluation, and the advice of the external evaluation committee, we commenced discussions to clarify responsible departments and policies to run the TGU project ourselves and formulating the 4th Mid-Term Plan.

☐ Training system toward international recognition
Since the COVID-19 pandemic stopped us from sending our faculty and staff members overseas completely, we explored and tried out online training. Short-term intensive language courses for our staff at the university in the United States were suspended but administrative personnel continued to be provided with e-learning materials and communication environments as well as English language training. We also provided practical online training to enhance communication skills (conversation and writing e-mails) to a total of 29 administrative personnel.

Education reform

☐ Education system reform
To improve the content and methods of the English-Japanese bilingual lectures, an evaluation is conducted through class surveys with students and faculty members every year, and the Educational Affairs Committee has been striving to evaluate and firmly establish the bilingual lectures across the university. Furthermore, delivery of the Global Leaders' Seminar (a four-day intensive course), a graduate school course for GAC students, now in its second year, was observed by a number of faculty members including members of the Office for Top Global University Project to roll the course out to other students and potential delivery by our own university lecturers.

☐ Enhancement of international mobility of students
Since the COVID-19 pandemic prevented students from going overseas, collaborative degree programs with overseas universities and graduate school international courses were delivered through maximum use of online courses. Meanwhile, the HABATAKE! TUT Overseas Training Support Campaign launched last fiscal year continued to be conducted under the new name, Go To Study Abroad Online. Under the slogan "Even the COVID-19 pandemic can't stop global learning! Don't let it nip your dreams of overseas study in the bud", we encouraged students to do overseas training saying that the university would bear the cost of online training provided by overseas universities recommended by the university or global training found by students themselves and, in the end, 12 students completed this program.
We have worked on the following initiatives to improve results in these indicators. We have set the following four specific indicators in this project:

1) Ratio of students (including international students) living in student accommodation on campus
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 have worked on the following initiatives to improve results in these indicators.

**Operation of the "TUT Global House"**
The construction of all of the six buildings of the TUT Global House was completed at the end of FY2018. In FY2020, a total of 157 students, including GAC and regular course students, lived together in this facility (101 Japanese students and 56 international students). The TUT Global House is campus accommodation primarily for GAC students who engage in cross-cultural exchange, the sharing and solving of problems arising from group life, and the planning and hosting of various events to acquire skills and international adaptability. In FY2020, since in-person activities were severely restricted due to the COVID-19 pandemic, two members of staff from the International Affairs Division took the lead in planning and delivering a range of online activities as dedicated program coordinators. Since the TUT Global House is a shared-house-style accommodation, utmost attention was given to measures to prevent the spread of COVID-19, and as result, there are no cases of infection so far.

**Increase in the number of students to be dispatched through the Global Internship Program**
In FY2020, all Japanese and overseas internship programs were suspended and replaced with on campus credit. Consequently, GAC students for whom the overseas internship is a course requirement were granted an exemption but, at the same time, we planned two types of online global skills training, which we offered to students in March to supplement their international experience, and a total of 26 students completed this training.

**Promotion of overseas training for university staff members**
Our short-term intensive course for learning English at Queens College at the City University of New York as well as our global staff development program utilizing our education base in Malaysia were both canceled in FY2020. We are examining when to resume this training based on an assessment of the future course of the COVID-19 pandemic.

**Initiatives to increase publication of research papers**
All overseas travel by staff for international conferences or collaborative research was suspended in FY2020 and we continued our activities online. The Research Administration Center provided support across the university under The Program for Promoting the Enhancement of Research Universities to ensure that research activities and the publication of research papers continued, without slowing down.

**Featured initiatives based on the characteristics of the university**

**Creation of a multi-cultural campus with the TUT Global House**
All GAC undergraduate students are required to live in the TUT Global House. In addition, regular course students hoping to play an active role in global society can live in the house and experience group life. In FY2020, online communication and activities inevitably increased but we actively explored implemented activities whilst preventing students from becoming depressed or demotivated by planning and incorporating socially distanced outdoor activities, depending on the situation.

**Reinforcement of partnership with ASEAN countries**
In FY2020, we were completely prevented from engaging in any activities, including the exchange and acceptance of international students and teachers, the dispatch of staff overseas, visits to ASEAN countries to promote TUT, entrance examination briefings, and recruitment activities. Whilst some activities were conducted online format instead, such online activities were limited. With the COVID era and post-COVID era firmly in mind, we began examining, under the guidance of TUT executives, actively using online tools to establish a new overseas exchange and collaboration frameworks and programs, arrange more substantive activities with partnership universities, strengthen communication and increase TUT’s global visibility.

**Summary of the Initiatives Completed in FY2020**
This project aims to realize a Multi-cultural Global Campus enjoying international recognition, mainly through the undertaking of the following three initiatives as its pillars:

1. Acceptance of students into the Global Technology Architects Course (GAC)
2. Implementation of the 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 - Accelerating and stabilizing the global circulation of all students, faculty members, and university staff between TUT and the world

In the fourth year since the launch of the GAC, the first cohort transferred from the third year of undergraduate completed the master’s course and 15 students received accreditation for completing the GAC. At the TUT Global House where GAC students live, the Global House Student Committee (GHSC) played a central role in promoting voluntary student activities and implementing Living and Learning program initiatives.

FY2020 was a year in which the COVID-19 pandemic put a stop to almost all international travel or travel to Japan and we had no choices but to make up for this with activities delivered online. While there will be no going back to international exchange activities as we knew them, FY2020 came as a painful reminder of the need to focus on and steer towards global activities and university globalization for the new era through online activities and digital transformation made possible by advances in IT technology.
9. State of Progress with Initiatives (FY2021)

- **Internationalization**
  - Operating the Global Technology Architects Course (GAC)
    With a total enrollment of 139 students, GAC is the backbone of the Super Global University (SGU) program. In FY2021, the student body consisted of 4 first-year students, 13 in the second year, 27 in the third year, and 48 in the fourth year. The master's degree program had 17 first-year students and 30 in the second year. Eighteen students completed their master's degree and were GAC certified. In the previous fiscal year, approximately half the students were unable to achieve the TOEIC 730 score, which is an accreditation requirement for Japanese students on the GAC course. This fiscal year, we started to prioritize English language learning support for master's students. As a result of counseling by English language learning advisers and English-speaking faculty, all Japanese graduates cleared 730 and obtained their GAC accreditation.
  - Continuing bilingual lectures in English and Japanese
    Bilingual lectures in English and Japanese continue to accelerate across the entire university ahead of the initial vision. There are now 738 bilingual courses for undergraduates and graduates (approximately 70.6% of all courses excluding language classes).
  - Implementation of the Living & Learning Program at the TUT Global House
    We operate the Living & Learning Program, educational program for residents at TUT Global House. The initiative, which has tried to visualize learning outcomes since FY2020, has attracted attention from the perspective of Living Learning Community research. In FY2021, we cooperated with a survey by the Japan Student Services Organization of initiatives to support students at universities. The survey report posted on the organization's website includes us as a pioneering example of an educational dormitory.
  - Support for learning and daily life
    To improve the language skills of all students, we ran the TOEIC IP test (online) to support students with learning English. We have also reinforced learning support by continuing to use learning advisers for both English and Japanese. We have arranged for a full-time faculty member to advise international students and a counselor with responsibility for international students at the newly established Student Support Center. The center also advises international students who are studying online in their home country because they cannot travel to Japan. We have also reinforced the support system for international students by arranging for a full-time faculty member to support them with employment and recruitment in Japan.

- **Governance reform**
  - Training system toward international recognition
    We have verified systems to encourage participation in faculty development (FD). As well as organizing training for the university departments into fields (management and operation, international cooperation, English language proficiency, student guidance etc.), we have also created a structure for faculty and staff development with clear-cut categories. We have started the Terashima-juku, a series of lectures presented by the university president. The lectures were offered for assistant professors and other young faculty members, for vice-presidents, faculty and other senior faculty members, and for administrative staff.

- **Education reform**
  - Cooperation with partner universities
    As was the case last year, the number of participants in the Global Leaders Seminar, a graduate curriculum for GAC students, was narrowed down as a COVID-19 measure. The English Language Institute (ELI) online course for the GAC English language program was held in cooperation with Queens College at City University of New York. In addition, as a measure to strengthen global experience initiatives and to promote collaboration with partner universities, we have decided to trial "international collaborative classes" for some courses at Toyohashi University from FY2022. The classes will be delivered online by faculty at partner universities abroad.
  - Enhancement of international mobility of students
    We are actively implementing initiatives to increase the number of students with experience of studying overseas by promoting double degree programs and overseas internships, and by implementing the HABATAKE! TUT Overseas Training Support Campaign. The percentage of students with overseas study experience reached 8.2% in FY2019 in comparison with 3.6% FY2015. As was the case last year, we have felt the impact of COVID-19 in FY2021. As a policy for global experience, we implemented international online studies with 44 students experiencing lectures of universities in overseas and internships online.
 Specific indicators and targets

We have set the following four specific indicators in this project:

1) Ratio of students (including international students) living in student accommodation on campus
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 have worked on the following initiatives to improve results in these indicators.

 Operation of the TUT Global House

This fiscal year, 144 students (96 Japanese, 48 international) shared life in the six buildings that make up TUT Global House. In FY2021, we welcomed a new house master who facilitated activities in the TUT Global House with a view to pursuing mutual learning, physical and mental health, and lasting friendships among all resident students through a variety of encounters. In FY2021, the global house staff created mutual learning among students by organizing cultural exchange events, such as Ikebana experience and supported several students-initiated events.

 Global internships during the COVID-19 pandemic

As was the case last year, we postponed sending students overseas for internships, but to be able to continue with the arrangement after the end of COVID-19, we organized online briefing sessions on the educational benefits of overseas internships for the Malaysian corporations that accepted students until two years ago. As a result of negotiating with joint research partners overseas, 1.2% of the student body (6/482 persons) did online internships at organizations overseas.

 Initiatives to promote overseas training for staff

As was the case last year, we had to abandon plans for overseas training, but approximately 38 persons attended online training (improving conversational skills, writing emails in English, English conversation).

 Initiatives to increase publication of research papers

The Research Administration Center is continuing with initiatives to improve productivity such as support for English proofreading of papers intended for publication and financial support to publish papers. At 281 papers in 2020 and 291 in 2021, the number of papers on leading-edge research (Web of Science articles and papers for review) is at the highest level compared to the past ten years.

 Featured initiatives based on the characteristics of the university

 Creation of a multi-cultural campus with the TUT Global House

GAC students who reside at the TUT Global House organized various exchanges on the university campus. In April, they organized a One Day Camp to welcome new students. The event was not only for GAC students, but faculty members and students on the general courses also participated. In all, 70 people enjoyed interacting with the new students and the international students.

 Strengthening international research skills

Since FY2015, we have published the TUT Research (online/pamphlet) newsletter in Japanese and English four times a year. We have set up a structure for issuing bilingual press releases on research outcomes in the form of EurekAlert! (online news release platform operated by the American Association for the Advancement of Science). In FY2021, 44 articles were distributed in both Japanese and English. We have released a total of 238 articles since December 2014 when we first started using the platform. The articles were accessed overseas and in Japan a total of 440,392 times in FY2021.

 Summary of Initiatives in FY2021

This project aims to realize a Multi-cultural and Global Campus enjoying international recognition, mainly through the undertaking of the following three initiatives as its pillars:

1. Acceptance of students into the Global Technology Architects Course (GAC)
2. Implementation of the Living & Learning Program at the TUT Global House, where Japanese and international students with diverse values live together
3. Global capability upgrade of all human resources - Accelerating and stabilizing the global circulation of all students, faculty members and university staff between TUT and the world

Following the first cohort (15 students), the second cohort of 18 students transferred to the third year of undergraduate studies, completed the master's course and received GAC accreditation in the fifth year since the launch of the GAC program. Since the whole university campus have made progress with bilingual classes due to this course, we have decided to eliminate its status as a special cu (admissions category). We will intensify discussions related to the nature of future courses as well as post-course development and insourcing.