

Outline of the Top Global University Project (Type A) at Keio University

1. Proposal for TGUP at Keio University

Program Name

Enhancing Sustainability of Global Society Through *Jitsugaku* (Science)

Keio's Aspirations for the Top Global University Project

Keio University will continue to educate the next generation of leaders who will play active roles on the world stage. Based on the spirit of *jitsugaku* (science), an educational philosophy espoused by Keio founder Yukichi Fukuzawa, we will make positive contributions to world development as an institution of higher education that can propose innovative social systems to the world. By achieving this, Keio University will gain recognition as a top global research university among the world's top 100 in the world university rankings.

Summary

The Top Global University Project at Keio integrates education and research in the humanities and sciences to enhance the sustainability of global society through *jitsugaku* (science). Keio aims to strengthen ties with international academic communities and industry while making positive contributions to the world. In this way, we hope to bolster Keio University's international reputation by building on our existing strengths and achievements. Specifically, under the integrative theme of Sustainable Development of a Super Mature Society, Keio has established three global initiatives: Longevity, Creativity, and Security.

The Headquarters for the Top Global University Project is currently consolidating University resources in each initiative to better support world-class education and research across the disciplines. Within each initiative, Keio will greatly improve its human resources management and educational systems; improvements include changes to the faculty salary policy, new cross appointment and tenure track positions, expanded degree programs offered in English, and a new visiting research co-advisor scheme for doctoral candidates. The University hopes that these human resources and academic policies will help increase international jointly authored research and the number of academic papers written in English, which in turn will lead to more citations and better representation of Keio's research abroad. The University will revamp its research information infrastructure in order to share its research findings with the world. This will enhance the University's international presence and reputation for education and research, which are measured by the number of citations and worldwide reputation surveys.

In order to reinforce university governance and presidential leadership, Keio will establish the Global Advisory Council as well as a discretionary fund that the president can use to distribute swiftly and flexibly in order to accelerate reform. Presidential leadership will promote new initiatives in Keio University's endeavors to become a world-leading research university.

Keio's Global Initiatives Across the Disciplines



Reaching Out to the World

Extensive Network of World-leading Partners
Pioneer of Double/Joint Degree Programs
Keio's Education and Research Abroad

Diversifying Our Education

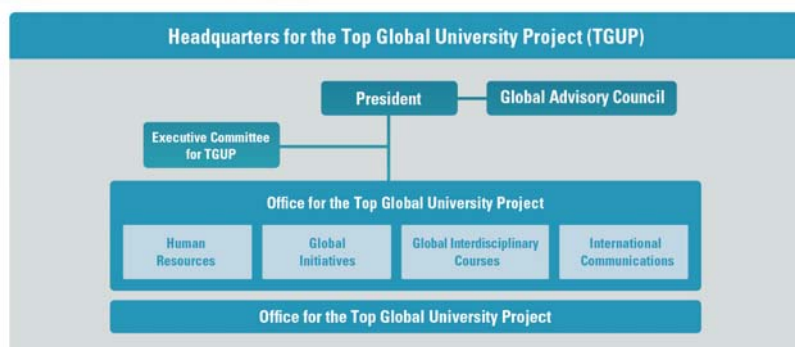
Doubling the International Student Population
Degree Programs Offered in English
Short Programs in Tokyo & Yokohama

Welcoming Internationally-Minded Researchers

New Tenure Track Opportunities for Young Researchers
Cross Appointment Opportunities for International Research Experts
Recruitment of Qualified Academic Faculty

Bolstering Our Research

Firm Ties with Industry
Creating and Protecting Intellectual Property
Sharing the Wealth



Summary of 10-Year Plan

○ Establishment of Keio's Global Initiatives

The University will launch the three initiatives of Longevity, Security, and Creativity to conduct transnational, transdisciplinary education and research to be shared with the world. These three initiatives form the basis of the Top Global University Project at Keio University.

○ Expansion of Double/Joint Degree Programs

As of 2014, Keio boasted 23 double degree programs with many leading universities around the world—the most of any university in Japan. The number of programs will increase to 35 in ten years' time.

○ Improving Overseas Research Hubs

Keio has plans to expand its overseas research hubs from 3 to 15 in fields spanning the natural and social sciences, humanities, and medicine. The University plans to use these hubs to promote partnerships for global research and define Keio's position as a world-leading research university.

○ Increased Employment of Foreign Faculty

The proportion of foreign academic faculty employed under the annual salary system/cross-appointment system and Japanese faculty who have either conducted research or earned a degree at an institution overseas will increase to 67.5%, or over two-thirds of the total academic faculty. The University will effectively play to these individuals' strengths to promote organic internationalization of the University's education and research systems.

○ Development of Degree Programs Offered in English & Increasing Inbound/Outbound Student Exchange

The University will launch the Global Interdisciplinary Courses (GIC) Program, an English curriculum across Keio's undergraduate faculties and graduate schools. Each faculty and graduate school will expand upon the common GIC platform with its own specialized curriculum to increase the number of courses available in English, which will lead to an increase in the number of degree programs available to international students. Combined with newly designed short-term summer programs, Keio will greatly increase its international student population. Within the next ten years, the University aims to create an environment where all Keio students have international experience of some kind, through short-term and long-term study abroad, internships, or otherwise.

○ Implementation of Initiative-based Human Resources Management

The University will formalize visiting research co-advisor appointments, which have been piloted by Keio's All-Round Program for Leading Graduate School, making the appointments available to all graduate schools. Moreover, under this framework, the University will devise a system within each initiative that supports and encourages joint research and jointly authored papers with researchers from Keio's partner institutions overseas. By 2023, foreign researchers will participate in doctoral candidates' research across the entire university.

Additionally, the University will establish a tenure track system that employs around five foreign faculty members per initiative to be the catalysts for joint research and jointly authored academic papers. Tenure track candidates must be highly motivated to conduct research and author academic papers.

Defining Characteristics of TGUP at Keio University

○ Giving Back Through Education/Research Findings

Under the integrated theme of Sustainable Development of a Super Mature Society, Keio will create three global initiatives: Longevity, Creativity, and Security. The University will consolidate university resources within each initiative to conduct practical, globally-applicable education and research that transcend traditional disciplinary boundaries and integrate the natural sciences, social sciences, and humanities. The University will serve as a model of social service and contribution to the world and gain prominence as a top world-leading research university. The initiatives form a university-wide system for research where academic faculty members from Keio's undergraduate faculties and graduate schools can engage in both basic and applied research.

○ Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses (GIC) Program, Keio's first university-wide English curriculum across the undergraduate faculties and graduate schools, will offer general education and specialized courses in English in an environment where students of all nationalities from different faculties and graduate schools can learn together. Moreover, the GIC Program will incorporate activities from each of Keio's global initiatives to foster students' ability to conduct research in English and author internationally relevant research.

Policies for International Collaboration

The University will utilize the cross appointment system and quarter system to invite foreign researchers and conduct international collaborations in research and education in capacities such as visiting research co-advisor. At the same time, Keio University faculty may also go abroad to serve as visiting research co-advisors for graduate students conducting research under foreign faculty and offer opportunities to advise joint research. This system will not only dramatically increase the mobility and international contributions of Keio's academic faculty, but will also make it possible to produce a new generation of academic researchers who are ready to succeed globally due to prior collaborative research and joint authorship.

Moreover, the University will work closely with its overseas partner institutions, who are some of Keio's most important assets, to promote the establishment of overseas research hubs for the purpose of collaborative research. The University will leverage its research and technological assets to form institutional relationships with universities and industries overseas that promote international collaboration. This signifies a move away from the volatility that researchers may experience when personally organizing joint research to a more stable mechanism that allows the University to provide the organizational support necessary to bolster new international developments. In addition to these measures undertaken by Keio University leadership, each undergraduate faculty and graduate school is also encouraged to pursue international collaborations of their own.

2. Keio's Current Progress Concerning Top Global University Project Initiatives (as of June 2015)

◆ Common Performance Indicators for TGUP

International Initiatives

○ Platform for Keio Research Released

The Keio Research Highlights website was released as a platform to deliver the latest information about the innovative research and revolutionary findings in the natural and social sciences and humanities at Keio, thereby increasing Keio's international research presence.

Visit the site: <http://research-highlights.keio.ac.jp/>

○ Establishment of All-English Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses (GIC) Center was established in 2014 to design the GIC Program, which started in April 2015. Keio's first university-wide curriculum conducted in English, the GIC Program is available to students across all of Keio's undergraduate faculties and graduate schools and will function as a platform that works towards developing courses which allow more students to study and graduate in English. The GIC Program launched with 13 Core Courses and 172 Research Courses that offer GIC credit.



Keio Research Highlights

○ A University-wide GPA Standard

Many of Keio's undergraduate faculties and graduate schools already use the grade point average (GPA) scale as an evaluation tool for advancement and graduation, academic advisement, scholarships and awards for academic excellence, and study abroad. In 2014, the University decided to formulate an institutional standard of evaluation to be implemented upon consensus among undergraduate faculties and graduate schools.

Governance Reforms

○ Appointment of Tenure Track Faculty

As defined by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), the "tenure track system" is a mechanism that enables young researchers to gain the experience needed to establish themselves in their field during a fixed term of service before obtaining a permanent tenure position. The research they produce during this period is strictly evaluated when considering them as candidates for tenure. While tenure track positions already exist within some undergraduate faculties and graduate schools, the University has now established "Regulations for the Top Global University Project Tenure Track System" in order to implement a university-wide tenure track system. As of Spring 2015, the University employs 36 tenure track faculty members, surpassing its tenure track target for 2020.

○ Establishing the Global Advisory Council

In 2014, the University established the Global Advisory Council (GAC), which acts as an advisory body to the Keio president, the university's head decision-maker. The University hopes to benefit from the expert opinions and international standpoints of GAC members, all of whom are presidents of distinguished universities overseas.

○ Establishment of a Presidential Discretionary Fund

The University has established a discretionary fund for the President to use swiftly and flexibly in order to inject funding and accelerate reform. This fund has made it possible for the University to prioritize and selectively consolidate resources on exceptional projects in need of funding. This fund helped bring together leaders from the business, academia, and government from throughout the Asia-Pacific region for candid discussions concerning key issues for the future of the Internet at the Association of Pacific Rim Universities' (APRU) Internet Business Offsite: "The Internet in the Asia-Pacific – Looking Ahead to 2025," which was held from March 10-11, 2015, at Keio University.



The Internet in Asia: Looking Ahead to 2025

Academic Reforms

○ Increased Number of Degree Programs Offered in English & Introduction of Third-Party Test Scores on Entrance Examinations

The Faculty of Economics has announced the "Programme in Economics for Alliances, Research and Leadership (PEARL)," a brand-new economics program offered entirely in English. The Faculty of Economics will begin accepting applications for the inaugural September 2016 admission in October 2015. This program, coupled with the Global Interdisciplinary Courses (GIC), will offer students a comprehensive education entirely in English, from general education requirements to areas of specialization. Designed to foster global economic leaders of tomorrow, PEARL equips students with a global perspective and a specialized knowledge of economics. PEARL students who qualify also have the opportunity to earn both their bachelor's and master's degree within a five-year period. Selection for the program will be based on overall academic readiness and English ability. Applicants' overall academic readiness will be evaluated using assessment tools such as the International Baccalaureate (IB) and SAT. English ability will be assessed using scores from the TOEFL, IELTS, and other approved third-party tests.

Additionally, the GIGA Program, which was launched at Shonan Fujisawa Campus (SFC) in 2011 under the Faculty of Environment and Information Studies, will expand to include the Faculty of Policy Management in September 2015.

◆ Keio University's Original Performance Indicators for TGUP

○ Visiting Research Co-Advisors

The University has developed a new scheme to invite researchers from abroad under a cross-appointment system as visiting research co-advisors to advise doctoral candidates. During a short-term pilot program in late 2014 and early 2015, the University invited over thirty visiting research co-advisors. In a post-pilot survey that reviewed outcomes of advisement, all parties involved—primary advisors, visiting research co-advisors, and doctoral candidates—expressed a high degree of satisfaction with the scheme. The University hopes to build enduring relationships with visiting research co-advisors who will contribute to joint research, joint editorship, and/or joint authorship with Keio's academic faculty and doctoral candidates, thereby helping to raise Keio's international reputation in the future.

○ Research Growth

In 2014-2015, Keio's research greatly exceeded many of its research targets. For example, the total amount of commissioned research grew 23% to 64 billion yen, and the total number of domestic/foreign patents grew 53% to 988. The University also established a hub for collaborative research with the U.S. National Institute on Aging, a world leader in aging and longevity research.



Open Research Forum

○ Double Degrees & Joint Degrees

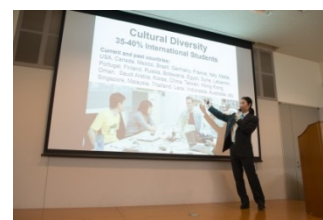
The University added three new double degree programs to bring the total number of double degree programs to 26—more than any other university in Japan. This surpasses Keio's target for 2016. The three new programs are between the following:

- Graduate School of Economics and Bocconi University;
- Graduate School of Science and Technology and the Free University of Brussels; and
- Graduate School of Science and Technology and Université catholique de Louvain.

Keio continues to promote active collaboration in education and research with universities overseas.

○ Keio's Global Initiatives

In 2014-2015, the University launched the three transdisciplinary initiatives of Longevity, Security, and Creativity. Kick-off symposiums for each initiative marked the beginning of advanced education and research within and between initiatives. As of June 2015, research centers for each initiative have been set up within Keio Advanced Research Centers (KARC) with a total of nine initiative-based research projects currently selected to receive internal research funding. This research will serve as the basis to attract other research projects and obtain external research funding to invite exceptional researchers from overseas for joint research. Keio expects to attain better international visibility by publishing high-quality papers jointly authored with international researchers and ultimately boost the University's international dimension.



Keio Creativity Initiative Symposium

Partnerships with Universities Overseas

In 2014-2015, Keio University leadership played a leading role in strengthening ties with universities overseas by instating a pilot cross-appointment scheme for visiting research co-advisors, establishing the Global Advisory Council (GAC), and developing new overseas research hubs. Keio's faculties and graduate schools have also driven efforts to strengthen collaboration with universities abroad. One of these programs is the "Joint Project Based Global Learning" between Master's students at Keio Media Design (KMD) and the Stanford University's Graduate Schools of Engineering and Education. This program gives students the opportunity to engage in a short-term collaborative project related to the application of new media and involves two-week stays at both Stanford University and KMD. Faculty members from each participating graduate school are appointed as project advisors. Though brief in duration, students encounter the distinctive educational methods of each of the graduate schools and experience the cultures and lifestyles of both the Silicon Valley and Tokyo. The program is intended for students to take their first steps on the road to global citizenship.

Commemorative Events

○ Keio Delegation to Harvard University: Celebrating 125 Years Since the Establishment of the First University Departments at Keio

The history between Keio and Harvard dates back to 1890, when then-President of Harvard, Charles Eliot, nominated three professors to head Keio's first three university departments of literature, economics, and law. To celebrate the 125 years since the first departments were established, a Keio delegation to Harvard in March 2015 was made possible with the cooperation of Harvard's Reischauer Institute of Japanese Studies and the Program on U.S.-Japan Relations, the Weatherhead Center for International Affairs.

President Seike met with Harvard President Drew Faust before giving a lecture as part of Keio's Longevity Initiative, titled "Japan's Aging Society and the Role of Higher Education," to a large audience which included many researchers and students. At the reception that followed, researchers from both institutions discussed opportunities to strengthen the Harvard-Keio relationship through joint research and academic exchange. Many Harvard students also showed a keen interest in studying in Japan at the information sessions held by Keio staff the following day.



President Seike gives a lecture at Harvard

The Top Global University Project at Keio University in AY2015-2016

Project-wide Performance Indicators and Target Goals

International Initiatives

Establishment and Operation of All-English Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses Program started in earnest across undergraduate faculties and graduate schools in AY2015-2016. As of May 1, 2016, a total of 1,162 students are enrolled in 75 core courses established within the GIC Center. This total increases to 8,337 students enrolled in 471 courses when all other GIC courses (international center courses, research courses, etc.) are included. We expect even higher enrollment with the incoming class in Fall Semester. The GIC Program is Keio's first university-wide curriculum conducted almost entirely in English and is available to students across all of Keio's undergraduate faculties and graduate schools. It functions as a platform for English-language courses that allows more students to graduate entirely in English.

International Student Dormitories

Keio has gradually added international housing with the increase in international student numbers, and in March 2016 the university opened the doors to the Okurayama Dormitory, the university's newest housing complex designed with international students in mind. In March 2017, Hiyoshi International Dormitory*, the university's first attempt at a truly international dormitory, is slated to open. Additionally, Keio has plans to open another international student dormitory at Tsunashima Sustainable Smart Town in Yokohama by March 2018.



3D rendering of Hiyoshi International Dormitory* (*Name tentative)

Increasing International Partner Institutions

In 2014, the total number of partner institutions at Keio University was 261. This number includes both department-level and university-wide partnerships for academic exchange and joint research. As of May 1, 2016, this number has increased to 310. As partnerships continue to thrive and grow, Keio has placed particular emphasis on increasing the number of exchange students through university-wide agreements by partnering with selective institutions abroad, which are limited to the most selective universities in the world. Partnership agreements are signed only after confirming real possibilities for exchange, and, as a result, we have experienced a steady but incremental net increase in student exchange numbers. Moreover, Keio is committed to strengthening its relationships with current partners by revisiting former agreements and negotiating increased student quotas.

Governance Reforms

Development of a Medium-Term Plan

Keio has raised objectives and guidelines for a medium-term plan, which formed the basis for individual policies established as short-term measures. Keio's selection for the Top Global University Project made the institution reflect on what Keio should look like by the end of the project in 2023 and resulted in the Keio Vision for 2023, which divides the years up to 2023 into three periods. First unveiled in 2015, the plan is in the midst of the first of these periods. This first period, dedicated to the promoting the Top Global University Project at Keio, focuses on communications, internationalization, and personnel system reform. Keio has committed to a proactive communications strategy in order to better convey its interdisciplinary, international strengths in advanced education and research, which are firmly rooted in the three initiatives of Longevity, Security, and Creativity.

Academic Reforms

Development of Short-Term Programs

The development of short-term programs is underway to increase the number of international students who come to Keio. Thesis@Keio, a program geared towards graduate students, began in 2015. Graduate students at the master's or doctoral level who are accepted to the program are allowed to conduct research at Keio and gain access to university resources. They may conduct fieldwork and interviews and receive advisement from Keio faculty members for their research. This new system provides students from other universities direct access to Keio academic faculty in order to further their research while Keio benefits by building an international academic network with talented graduate students and early-career researchers from abroad. Additionally, numerous new programs are slotted for Summer 2016 and beyond across many different faculties and graduate schools.



Keio Short-Term Japanese Studies Program

PEARL Applications Begin

The Faculty of Economics began accepting applications for the "Programme in Economics for Alliances, Research and Leadership (PEARL)," a brand-new economics program offered entirely in English. The university has received a large volume of applications from students of various backgrounds from Japan and abroad. As of June 2016, inaugural applicants are finishing their final admissions procedures.

University-specific Performance Indicators and Target Goals

Improving and Increasing Overseas Research Hubs

Keio is dedicated to building an environment that makes it easy to deliver world-leading research findings and promote international joint research. The university is enhancing collaboration with research hubs abroad to improve its visibility abroad and increase its number of internationally co-authored publications. Since 2014, Keio has increased its number of research hubs abroad from four to sixteen. The university will continue to increase these hubs in both quality and quantity and provide the high degree of mobility essential to successful joint research.

International Partnerships (As of May 1, 2016)

Australia	University of New South Wales	Singapore	Keio – Nus CUTE Center
Australia	University of Sydney	Switzerland	The European Organization for Nuclear Research
Austria	University of Vienna The Faculty of Historical and Cultural Studies	USA	National Institute on Aging Intramural Research Program
Austria	University of Vienna The Faculty of Psychology	USA	Broad Institute of MIT and Harvard
France	The Centre National de la Recherche Scientifique	USA	Georgia Institute of Technology
France	Commissariat à l'énergie atomique et aux énergies Alternatives	USA	University of California, Berkeley Precision Manufacturing Center in the Department of Mechanical Engineering
France	The ITER International Fusion Energy Organization		
India	Indian Institute of Technology Hyderabad		
Korea	Yonsei University Center for Information Technology and Governance	USA	Washington University in St. Louis School of Medicine

Visiting Research Co-Advisor Scheme in Full Swing

The university commenced full operation of its cross-appointment scheme to employ researchers from abroad as visiting research co-advisors to advise doctoral candidates at Keio. In AY2015, Keio welcomed a total of 60 co-advisors. Just as the year before, all parties involved—main research advisors, visiting research co-advisors, and doctoral candidates—expressed a high degree of satisfaction with the scheme. Several joint research and co-authored papers have been or are currently in the process of being published. The university expects their contributions will have a positive impact on citation and ranking indices.



A visiting research co-advisor meets with a Ph.D. candidate

Expanding Global Visibility

Communicating Keio Research Better Than Ever

In November 2015, Keio implemented Pure, a researcher information system made by Elsevier, to announce the findings and contributions of Keio research to the world. The research findings of full-time academic faculty recorded on Scopus, the world's largest abstract and indexing database of research information, are released on Pure. Making this information readily available to other institutions and researchers, especially those abroad, joint research.

Keio Ageing Week

Keio Ageing Week was held from Sunday, October 4, to Friday, October 9, 2015. Organized by Keio University with the collaboration and cooperation of various organizations, including the World Economic Forum (WEF), the World Health Organization (WHO), and Osaka University, the week consisted of an international conference and various events including lectures focused on healthy ageing, or more specifically, exploring solutions to challenges related to an ageing society. World-leading researchers convened to discuss issues related to a super-ageing population and cognitive decline as part of Keio University's ongoing research on longevity, one of Keio's global initiatives and a field in which Keio has long had a strong reputation. This meeting provided new insights needed to spark joint research on building a society that can cope with an ageing population through ongoing interdisciplinary and international research.



International Conference on Cognitive Decline and its Economic Consequences Co-hosted by Keio University and the World Economic Forum