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ACTION PACKAGE

MARCH 2022 VERSION



教育

多様性

研究

経営

Tokyo Tech's vision

Realizing a world-leading science and technology university

— Pioneering a new era through continuous dialogue with society and the discovery of hidden possibilities in science and technology —

3 OBJECTIVES

Developing talented individuals who are motivated to work on a worldwide level, are open to various cultures, and have broad knowledge of science and technology

Taking on the role of a facilitator of science and technology that objectively provides knowledge to the public while co-designing a future vision with society

Contributing to the development of industry and the welfare of human beings by examining scientific principles and creating innovative technology while preserving the environment and promoting peace

This Action Package has been formulated to guide Tokyo Tech towards the achievement of its mission, objectives, and vision for the future.

Based on the mission, objectives, and the resulting vision of the Institute, this action package lists strategies for realizing the image, or vision, of a desired future of Tokyo Institute of Technology during the fourth mid-term objectives and mid-term plan period (fiscal years 2022-2027), and in the years that follow. Some of these strategies have been combined with the objective outlines presented by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and have been approved as part of the Institute's mid-term plan by the Minister of Education, Culture, Sports, Science and Technology. Other strategies will be implemented while reviewing their appropriateness through dialogue with Tokyo Tech faculty, staff, students, and other stakeholders, and while considering the progress of each initiative and its relationship to effectiveness and cost.

The strategies described in this action package include ambitious and challenging ones that go beyond the conventional boundaries of national university corporations. These strategies not only aim to set Tokyo Tech apart from other national university corporations, but are also viewed as necessary for the university to achieve world-leading standards and be recognized as having attained great heights globally. As a result, the Institute's appearance and positioning may deviate from those of other national university corporations in the near future. Tokyo Tech, however, is unafraid of change, for we see an alternate future.

(Partial excerpts from Action Package preamble)

ACTION PACKAGE

MARCH 2022 VERSION

Based on the desired direction of the Institute, Tokyo Tech developed 22 standards and 99 measures to be implemented strategically with a medium- to long-term perspective. While working in collaboration with society as Team Tokyo Tech, the Institute is committed to creating a prosperous future society and to ensuring the sustainable development of Tokyo Tech and the world.



1 Advancement of student-centered learning

Provide outstanding education that helps students develop broad perspectives, leadership skills, and their own vision to change the world.

9 STANDARDS

40 MEASURES



2 Creation of societal impact through rapid, far-reaching research progress

Provide an environment where researchers can thrive and produce numerous innovative research findings that demand public attention and serve as the foundation of future society.

4 STANDARDS

21 MEASURES



3 Promotion of diversity to foster creativity

Firmly establish Tokyo Tech as a place of freedom where individuals are respected and those who want to learn gather. Provide a place where such people can express their thoughts openly, listen to the thoughts of others, and nurture each other's creativity.

1 STANDARD

6 MEASURES



4 Strengthening of management base and efficiency of operations

Maintain the status of an institution that provides the highest added value by quantitatively communicating the impact of Tokyo Tech educational and research activities to society to gain its trust, and by ensuring that the Institute's faculty and staff have time to freely pursue their ideas and activities through well-structured operations.

8 STANDARDS

32 MEASURES

Pioneering a new era while aiming for greater heights globally

Designated National University scheme

Tokyo Tech strategic plan 2018-2023
-Dedicated to creating a better future-

Future concepts for each School, institute, etc.

2018 Tokyo Tech Commitments
-Appreciating diversity collaborative challenges
decisive action-

Planned management reforms, etc.

"Tokyo Tech 2030" statement
-We see an alternate future-

1.

Advancement of student-centered learning

Provide outstanding education that helps students develop broad perspectives, leadership skills, and their own vision to change the world.

Standard

1. Bachelor's degree program education (related to mid-term plan[3])

The bachelor's degree program fosters in students the basic ability to demonstrate specialized skills and apply diverse perspectives that connect to solutions to societal issues.

Evaluation indicators

1. As a foundation on which students can develop their diverse perspectives and demonstrate their expertise, establish during the 4th mid-term goals period multiple new programs of interdisciplinary study in which these students can systematically study fields other than their own.

Measures

1. Establish programs for systematic study of different specialized fields in the bachelor's degree program.
2. Adjust the way students take the Independent Research Project and the Advanced Independent Research Project so that they can acquire more diverse experiences and enhance basic academic skills in their specialized fields.
3. Develop an environment of digital transformation in order to provide students with diversity in education, including online education.
4. Establish a single organization that offers interdisciplinary courses which foster diversity and independence, the Multidisciplinary Program based on Institute-wide, inter-School subjects, joint courses with other universities, international programs, etc.
5. Launch entrepreneurship education at the bachelor's program level, consider connectivity between bachelor's, master's, and doctoral programs, and enhance entrepreneurship education at the master's and doctoral program levels.
6. Promote education that fosters diversity through mutual learning and teaching among students.
7. Verify that the sequence of education from the bachelor's to the master's and doctoral program is developing capabilities appropriately, and make necessary improvements. Additionally, visualize the effects of research and education.

Standard

2. Master's and doctoral degree program education (related to mid-term plan[4])

At the graduate level, the master's degree program develops basic knowledge of advanced science and engineering, and practical skills to solve societal issues, the professional master's degree program fosters expertise in technology management and the practice of innovation to develop leaders in specific professional fields, and the doctoral degree program cultivates the ability to exercise leadership in solving societal issues, and highly advanced professional skills and creative research abilities that graduates can utilize actively in various fields.

Evaluation indicators

1. Establish at least two new interdisciplinary graduate majors in the 4th mid-term goals period to succeed Tokyo Tech's Doctoral Program for World-leading Innovative & Smart Education (WISE).
2. During the 4th mid-term goals period, increase to 15% the percentage of doctoral students participating in dissertation defenses attended by external examiners who can evaluate appropriately students' abilities from both an academic perspective and a perspective of various other values.

Measures

1. Provide, on an Institute-wide basis, graduate-level education required as basic training for advanced science and engineering professionals in fields such as data science and AI.
2. Utilize education in collaboration with a variety of external institutions to increase opportunities for students in graduate-level programs to learn in industry and other societal settings in order to develop human resources who can demonstrate their expertise while considering solutions to real societal issues.
3. Establish and expand interdisciplinary graduate majors at the graduate level to encourage education through collaboration in different fields and fusion of different disciplines, and to develop professionals who can demonstrate their abilities in various areas of society and create innovation.
4. Conduct, now and in the future, graduate-level education that promotes the evolution of liberal arts education, and foster in students basic leadership skills required of science and technology professionals, including open dialogue and communication with counterparts, and heightened awareness of societal issues.
5. Develop an environment of digital transformation in order to ensure diversity in education, including online education.
6. Establish a single organization that offers interdisciplinary courses which foster diversity and independence, the Multidisciplinary Program based on Institute-wide, inter-School subjects, joint courses with other universities, international programs, etc.
7. Launch entrepreneurship education at the bachelor's program level, consider connectivity between bachelor's, master's, and doctoral programs, and enhance entrepreneurship education at the master's and doctoral program levels.
8. Promote education that fosters diversity through mutual learning and teaching among students.
9. Verify that the sequence of education from the bachelor's to the master's and doctoral program is developing capabilities appropriately, and make necessary improvements. Additionally, visualize the effects of research and education.
10. Develop a graduate follow-up survey system to ensure educational quality assurance.
11. Enhance career education further to enable graduates to be more active in society.

Standard

3. Training doctoral degree program students

(related to mid-term plan[6])

Treat doctoral students as educators and researchers who will lead the next generation, and enhance their ability to act as autonomous, advanced science and engineering professionals.

Evaluation indicators

1. Increase the total number of students at various levels of the B2D Scheme, which cultivates professionals who aim to become autonomous researchers at an early stage, to 80 or more by the final fiscal year of the 4th mid-term goals period.

Measures

1. Expand the education program that provides research-oriented studies from an early stage in the bachelor's degree program for those students who aim to obtain a doctoral degree (B2D Scheme).
2. Create opportunities for doctoral students to teach both within and outside the Institute to enhance their teaching and research guidance skills.
3. Improve financial support for doctoral students.

Standard

4. Career paths for doctoral students and postdoctoral researchers

By diversifying career paths and improving mobility through collaboration and joint efforts with industry and other sectors, create an environment where emerging researchers, including doctoral students and postdoctoral researchers, can play an active role based on their own wishes and aptitudes, and demonstrate their abilities in various domestic and international venues beyond the boundaries of industry, academia, and government.

Evaluation indicators

1. Achieve nearly 100% enrollment in doctoral program vacancies each academic year.

Measures

1. Promote the training of doctoral students in collaboration with industry, make the abilities of these students more visible to industry, and establish a mechanism to ensure that doctoral degree holders are appropriately employed by industry.
2. Establish a mechanism to provide entrepreneurship education and support systematically for doctoral students and postdoctoral researchers, and clarify that entrepreneurship is also an important career path for emerging researchers.

Standard

5. Fostering global human resources (related to mid-term plan[5])

Expand education further to foster international perspectives and promote the development of global human resources.

Evaluation indicators

1. Encourage participation in international activities in order to foster graduate-level students with global perspectives, and increase the percentage of students who have international experience by the end of their master's degree program to at least 90% during the 4th mid-term goals period.

Measures

1. Ensure that graduate-level classes continue to be taught in English, and introduce preliminary English-language instruction in the latter years of the bachelor's degree program.
2. Enhance support for Japanese students' dispatch overseas and acquisition of international perspectives, and boost educational programs that involve international students to establish firmly that students possess international experience by the time they complete their master's degree program.
3. Consider and initiate new ways to implement international education and international collaboration in the post-COVID-19 era.
4. Promote strategic international collaboration through overseas Tokyo Tech ANNEXes and international inter-university consortiums, and conduct student exchange programs, etc. that contribute to the future networking of participating students.
5. Expand dual degree programs, joint degree programs, and programs with joint doctoral candidate supervision.

Standard

6. Continuing education (related to mid-term plan[7])

Establish and strengthen a system that enables working adults, mainly in the fields of science and engineering, to acquire the advanced knowledge, literacy, and research skills necessary to respond to changes in society.

Evaluation indicators

1. Establish a new mechanism to provide working professionals access to Tokyo Tech's doctoral degree program, accept such students into said doctoral degree program, and begin teaching this program during the 4th mid-term goals period.
2. Increase the number of continuing education courses for working professionals to 50 by the final fiscal year of the 4th mid-term goals period.

Measures

1. Establish a new mechanism to accept working professionals active in industry and other sectors as students in the Tokyo Tech doctoral degree program.
2. Strengthen overall continuing education through the continuing education components of the Tokyo Tech Academies for the WISE Program and continuing education conducted by Tokyo Tech's Schools, Departments, and Institutes.
3. Dispatch some faculty members to lecture in educational programs mainly aimed at working professionals and conducted by Tokyo Tech Innovation Co., Ltd., a subsidiary company of the Institute.
4. Develop actively education and research outreach activities, not only towards younger generations such as middle and high school students, but also towards working adults and senior citizens.

Standard

7. Tokyo Tech High School of Science and Technology

(related to mid-term plan[10])

Aim to cultivate genuine human resources in science and technology who can play active roles on the world stage, promote the advancement of high school education through high school-university collaboration, etc., and utilize these results to develop Tokyo Tech High School of Science and Technology, and other high schools, etc.

Evaluation indicators

1. Based on the verification of educational outcomes of research and development projects, select carefully courses from Tokyo Tech's offerings that contribute to the understanding of university-level science and engineering, and during the 4th mid-term goals period, construct a mechanism that allows high school students to take these courses.

Measures

1. Enhance the verification of educational outcomes and strengthened collaboration with overseas science and mathematics-focused high schools through research and development projects.
2. Take advantage of the relocation of Tokyo Tech High School of Science and Technology to Ookayama Campus to strengthen further high school-university collaboration, establish a mechanism (Advanced Placement) that allows high school students to take courses at Tokyo Tech and matches the characteristics of a science and engineering university, provide high school education in line with the Institute's development of next-generation human resources, and expand these approaches to other high schools, etc.
3. Consider enhancing the educational environment at Tokyo Tech High School of Science and Technology.

Standard

8. Collaboration with other institutions (Confederation of the Four Universities) (related to mid-term plan[9])

In order to provide interdisciplinary solutions to increasingly complex societal problems and develop human resources with advanced collaborative and problem-solving skills, the Confederation of the Four Universities (Tokyo Medical and Dental University, Tokyo University of Foreign Studies, Tokyo Institute of Technology, and Hitotsubashi University) will collaborate to plan and develop a wide range of education, research, and social collaboration activities.

Evaluation indicators

1. Increase the number of participants in and quantity of collaborative activities of the Confederation of the Four Universities that contribute to education, research, and society (collaborative courses, conferences, joint research and educational project activities), and enhance the quality of these activities in terms of diversity and content compared to the 3rd mid-term goals period.

Measures

1. Send executive vice presidents, etc. to regular liaison meetings of the four universities to maintain and strengthen the ethos of the Confederation of the Four Universities.
2. Expand activities conducted in collaboration with the three other universities and diversify the content of such activities.
3. Increase enrollment in the Multidisciplinary Program course offerings in the Confederation of the Four Universities charter based on the establishment of a single organization providing interdisciplinary courses, etc.

Standard

9. Reform of admission selection

Establish an admission selection system that effectively receives diverse human resources.

Evaluation indicators

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Measures

1. Examine measures to accept diverse applicants to bachelor's degree programs, and implement the measures that are feasible.
2. Examine appropriate approaches to the admission process for master's and professional master's degree programs.

2.

Creation of societal impact through rapid, far-reaching research progress

Provide an environment where researchers can thrive and produce numerous innovative research findings that demand public attention and serve as the foundation of future society.

Standard

1. Boosting the Institute's research prowess and sharing research findings with society (related to mid-term plan[8])

With a spirit of challenge, continue to explore the truth and pioneer wisdom on the frontiers of science and technology, and consistently communicate the value of these efforts to society. In particular, continue to construct research methods based on real co-creation between science and engineering and the humanities and social sciences, which help redefine science and technology, and create comprehensive knowledge that brings about social change.

Evaluation indicators

1. Increase the number of academic papers (peer-reviewed) compared to the 3rd mid-term goals period.
2. Maintain the highest level of Grants-in-Aid for Scientific Research (KAKENHI) granted and amount of funding obtained per faculty member.
3. Achieve a total of over 30 social problem-solving transdisciplinary science and humanities co-creation research projects, each with a project budget of over JPY 1 million, in the 4th mid-term goals period.
4. Achieve a level of approximately JPY 3.6 billion in revenue from collaborative research with industry by the final fiscal year of the 4th mid-term goals period.
5. Achieve a cumulative total of approximately 110 research-based Tokyo Tech Ventures at the end of the 4th mid-term goals period.

Measures

1. Promote world-leading research based on appropriate research and HR strategies, including HR development, for each organization and field, and as a university, demonstrate the significance of this research to the public.
2. Promote research in new and interdisciplinary fields using the Research Unit system, and based on these efforts, aim to develop fields with more depth and profundity that consequently develop into Research Centers.
3. Establish a research environment that enables researchers to realize their intended research projects together with research support personnel, formulate a policy for the utilization of research data—a type of research finding in itself—and forge an information environment that helps realize this policy.
4. Uncover research issues by backcasting from an image of a desired future society, and based on solutions to these issues, construct and implement science and technology methods that promote the development of new and deeper research. Additionally, through co-creation with the humanities and social sciences, identify and solve societal issues through dialogue with the public, establish and put into practice science and technology methods that help implement these solutions, and verify these solutions in society.
5. Promote collaborative research between industry and academia with the aim of implementing research findings in society, form a hub that earnestly fosters, creates, and supports startup companies based on these research findings, and through collaboration with other universities and venture capital firms in conjunction with the Startup Ecosystem – Tokyo Consortium, provide continuous and sustainable support from entrepreneurship education to startup creation and growth support for these startups.
6. Share information on the Institute's researchers in a timely and appropriate manner, and enhance the visibility of Tokyo Tech research.
7. Build a strong international network of researchers in various fields and utilize this network to strengthen the research capabilities of the Institute.

Standard

2. Formulating hubs of world-leading standards

(related to mid-term plan[1])

In an internationally recognized education and research environment, Tokyo Tech will focus on the priority fields and strategic areas set forth in its Designated National University scheme, attract human resources from inside and outside the Institute who can contribute to the creation of new knowledge and value, and construct a world-leading hub that aims for rapid, far-reaching progress in the development of science and technology.

Evaluation indicators

1. Increase the number of front-line researchers participating in the International Research Frontiers Initiative (IRFI) to approximately 100 per year by the end of the 4th mid-term goals period (excluding on-campus researchers acting as principal investigators or research collaborators in the research hubs included in IRFI).

Measures

1. Establish, based on Tokyo Tech's research strategy, the International Research Frontiers Initiative (IRFI) as an Institute-wide research structure which extends across multiple world-leading research hubs in order to take on the challenge of highly innovative research.
2. Apply a human resources strategy that takes advantage of co-creation with an international network of researchers, invite to and hire at the Institute the most suitable personnel from Japan and overseas while giving due consideration to diversity, and utilize faculty posts created at the discretion of the president.
3. Establish a startup support system and a personnel system that treats outstanding human resources appropriately and better facilitates the invitation of researchers from abroad, and secure the financial resources required to enable these improvements.
4. Improve the evaluation criteria used at the time of employee selection and performance evaluation, and conduct evaluations based on these criteria.
5. Organize and implement support services that promote the activities of a diverse range of Tokyo Tech members, and guarantee security export control and research integrity approaches that are in line with the internationalization and openness of research.
6. Promote the efficient use of cutting-edge research facilities, computational infrastructure, and academic and research data infrastructure to ensure that new faculty members joining the Institute can begin their education and research activities immediately.

Standard

3. Collaboration with research institutions at home and abroad

Promote research collaboration that transcends the boundaries of individual universities, and strengthen and expand the Institute's functions by sharing and integrating human and material resources that single universities cannot possess.

Evaluation indicators

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Measures

1. Promote research collaboration by utilizing research communities at home and abroad.
2. Promote research collaboration through the shared use of research infrastructure.
3. Conduct joint education and research activities with overseas universities, companies, etc. through overseas Tokyo Tech ANNEXes.
4. As one of the frontiers of Tokyo Tech's development, consider establishing a collaborative research center jointly with medical universities, etc., which aims to advance the field of health and wellbeing as sought after by members of society.

Standard

4. Maintaining and improving the research environment based on research facilities (related to mid-term plan[12])

Provide effective and efficient research facilities that generate world-leading research findings.

Evaluation indicators

1. Establish multiple facility sharing centers based on a research infrastructure strategy.
2. Increase average revenue obtained from the use of shared facilities compared to the 3rd mid-term goals period.
3. Begin training, etc. at the TC College in earnest in fiscal year 2022, and grant Technical Conductor (TC) certification to at least two persons each fiscal year starting from fiscal year 2023.

Measures

1. Promote the introduction and provision of advanced, shared research facilities and technical support based on the research infrastructure strategy led by the Open Facility Center.
2. Provide access to the TSUBAME4.0 supercomputer and other powerful computing resources.
3. Construct a mechanism to train and certify Technical Conductors (TCs) who possess advanced technical skills and research planning abilities by providing technical staff with training and other programs that boost skills and career development at the TC College, which conducts development of advanced technical support staff.
4. Appropriately manage and maintain Institute-wide information infrastructure facilities, which serve as the foundation for Tokyo Tech operations, including research.

3.

Promotion of diversity to foster creativity

Firmly establish Tokyo Tech as a place of freedom where individuals are respected and those who want to learn gather. Provide a place where such people can express their thoughts openly, listen to the thoughts of others, and nurture each other's creativity.

Standard

1. Enhancing diversity among students, faculty, and staff

Increase the diversity of Tokyo Tech's student body so that those studying at the Institute can engage in friendly competition regardless of nationality, cultural background, or personality, and will develop an interest in the issues facing global society and the ability to contribute to solving these issues.

Increase diversity among faculty, staff, and researchers, not only in terms of external diversity factors such as age, gender, nationality, and race, but also in terms of internal diversity factors such as education and research styles, values, etc. so that these community members can positively influence each other.

Furthermore, build an environment where these diverse human resources can make the most of their abilities.

Evaluation indicators

Related: Reference indexes, Designated National University scheme

- Ratio of international students
2030- : 25%
- Ratio of female students
2030- : 20%
- Ratio of female faculty
2030- : approx. 20%
- Ratio of international faculty
2030- : 30%

Without limiting itself to the above numerical targets, Tokyo Tech will strive to develop its systems and programs, foster awareness, and create an environment in which all members can play an active role while respecting each other's values and abilities.

Measures

1. Increase further the percentage of Tokyo Tech's international students, and the percentage of Japanese students with study abroad experience.
2. Increase significantly the percentage of Tokyo Tech's female students.
3. Promote the development of an environment that respects the external and internal diversity of individual faculty members and researchers, improve the evaluation criteria used at the time of employee selection and performance evaluation, and conduct evaluations based on these criteria.
4. Realize an environment in which educational and research activities are not restricted by cultural background, language, gender, or stage of life.
5. To provide an environment where diverse students, faculty, and staff can play active roles without inhibitions, strengthen the system to eradicate harassment and enhance care, including mental health care, for all Tokyo Tech members.

4.

Strengthening of management base and efficiency of operations

Maintain the status of an institution that provides the highest added value by quantitatively communicating the impact of Tokyo Tech educational and research activities to society to gain its trust, and by ensuring that the Institute's faculty and staff have time to freely pursue their ideas and activities through well-structured operations.

Standard

1. Diversifying financial resources

(related to mid-term plan[14])

In order to secure the necessary funding for world-leading education and research activities and university management, diversify financial resources and implement strategic and prioritized resource allocation through a top-down approach.

► Additional standard

Standard related to strengthening the financial base and acquiring new financial resources for growth through Tokyo Tech's virtuous cycle

Advance strengthening of Tokyo Tech's financial base and acquisition of new financial resources for growth by securing the funding needed for Tokyo Tech to grow according to expectations, while conducting world-class education and research activities and management.

Move away from zero-sum management by achieving sustainable growth in terms of the financial scale (cash flow) of the Institute.

Evaluation indicators

1. Increase the total amount of income from industry-university cooperation, donations, and rent fees, etc., by at least 20% in fiscal year 2027, compared to the fiscal year 2019 level.
2. Reduce the percentage of income from management expense grants for national university corporations by at least 2.5% in fiscal year 2027, compared to the fiscal year 2019 level.
3. Increase the amount of funds to be invested strategically in Tokyo Tech education and research infrastructure, which will form the source of the Institute's "future intellectual assets," to approximately JPY 2 billion per annum by the final fiscal year of the 4th mid-term goals period.

Measures

1. Develop financial forecasts and management strategies, establish and utilize evidence-based financial management, and promote strategic and prioritized resource allocation, etc.
2. Strengthen financial base by acquiring resources through industry-academia collaboration, but also through multifaceted methods such as expanding the Tokyo Institute of Technology Fund and utilizing effectively campuses and other owned assets. Furthermore, utilize income from the Tamachi Campus Redevelopment Project as seed funding, strategically invest in initiatives that generate cash flow greater than the amounts invested, and plan and execute a growth strategy based on Tokyo Tech's virtuous cycle in which a part of the profits obtained accumulate in the Institute's investments.
3. Communicate to society the impact and appeal of Tokyo Tech activities, and utilize the resulting public trust to attract further HR and financial investment while strategically allocating obtained management resources back into education, research, and other foundations of the Institute.

Standard

2. Innovation creation through campus redevelopment

To create new innovations through campus redevelopment, the Institute will strategically construct a unique Cross-Campus Innovation Ecosystem in which Tokyo Tech knowledge, people, and funding circulate among its three campuses, and which connects to off-campus entities via an organic, evolving network of industry-university-government partnerships.

Evaluation indicators

1. Complete the basic design of Tokyo Tech facilities and incubation facilities on Tamachi Campus by fiscal year 2026 in preparation for the opening of the campus around fiscal year 2030.
2. With the goal of completing the Suzukakedai Campus redevelopment project in fiscal 2031, aim to begin redevelopment work by fiscal 2027.
3. On the second, third, and fourth floors of the Campus Innovation Center on Tamachi Campus, create facilities for a startup environment and aim to begin leasing out space to startup companies, etc. by in the latter half of fiscal year 2022.

Measures

1. Based on the Cross-Campus Innovation Ecosystem concept 2031, advance with the redevelopment of Tamachi and Suzukakedai Campuses, and the subsequent redevelopment of Ookayama Campus, around the time of the 150th anniversary of the Institute's founding, form a base for education, research, and social collaboration that leads to the creation of new industries, and expand the network of industry-university-government collaboration both within and outside Tokyo Tech.

Standard

3. Maintenance and improvement of education and research facilities through enhancement and appropriate use of facilities

(related to mid-term plan[13])

Secure the investments required to enhance, reform, and extend the lifespan of facilities, halt the growing trend of deterioration, and make effective use of owned facilities through strategic space management.

Evaluation indicators

1. Reduce the deterioration rate of facilities by 5% or more in fiscal year 2027 when compared to the deterioration rate in case of no maintenance.
2. Increase the number of transfers and conversions of on-campus spaces to an annual average of 800 units or more during the 4th mid-term goals period.

Measures

1. Formulate the Tamachi Campus Redevelopment concept (provisionally by fiscal year 2022) and move forward with subsequent basic plans for the redevelopment of Ookayama and Suzukakedai Campuses based on the Cross-Campus Innovation Ecosystem concept, revise the Tokyo Tech Campus Master plan in the 4th mid-term goals period, and systematically promote the functional enhancement, reform, and increased lifespan of facilities. In addition, based on the comprehensive usage policy for Tokyo Tech's three campuses (fiscal year 2014), systematically promote zoning and reallocation of facilities, spaces, etc. while considering the role of each campus, required functions, aging facilities and spaces, and location conditions, etc., to ensure a functional and high-quality campus environment.
2. Develop and utilize a system for allocating and bearing the cost of on-campus space, and enhance effective utilization of owned facilities and strategic space management.
3. Promote measures to combat global warming and conserve energy, and contribute to carbon neutrality.
4. Further promote Measure 3, and develop and implement a timetable for making the Institute's campuses carbon neutral in order to demonstrate Tokyo Tech's presence as a world-leading science and technology university.

Standard

4. Collaboration with self-governing bodies, etc.

By promoting systematic cooperation with self-governing bodies, etc., strengthen and expand functions by sharing and integrating human and material resources, and upgrade existing Tokyo Tech education and research infrastructure.

Evaluation indicators

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Measures

1. Contribute to the development of self-governing bodies based on collaboration agreements, seek relaxation of various regulations, and upgrade existing Tokyo Tech education and research infrastructure, including the sustainable development of the Cross-Campus Innovation Ecosystem.

Standard

5. Internal controls and governance

(related to mid-term plan[11])

To realize a world-leading science and technology university, Tokyo Tech will implement university management under the leadership of the president that aims for continuous development during the six-year mid-term goals period and beyond as a Designated National University.

Evaluation indicators

1. Maintain a progressive governance system that enables university management based on a long-term vision.

Measures

1. Apply the strengthened governance system developed in the 3rd mid-term goals period, together with internal control functions, to gain increasingly the trust and support of the public, diversify financial resources, and promote measures regarding the enhancement of education and research activities and improved efficiency in administrative duties, etc.
2. Utilize the expertise of professionals and continue to develop human resources capable of taking on specialized university management positions in order to maintain a progressive governance system that enables university management based on a long-term vision.
3. To expand the human resources in charge of education, research, and organizational management, promote the employment of regular faculty and staff with external funds set aside for direct expenses, etc. and, on the premise of clarification of individual efforts, maximize faculty and staff members' abilities by applying a system in which they are in charge of work in multiple areas (through internal cross-appointments, concurrent assignments, etc.).
4. Effectively utilize the subsidiary company of Tokyo Tech in order to continue to develop the Institute's activities, especially its external activities.
5. Create opportunities for students, who are the Institute's most powerful stakeholders, to be involved in the management of Tokyo Tech, and create together with students ways for them to proactively engage with the Institute.
6. To enhance the Institute's reputation as a world-leading science and technology university, strengthen Tokyo Tech's network with alumni and those who have been involved in the education, research, and societal impact created by the Institute, and implement measures to encourage these people to become supporters of Tokyo Tech.

Standard

6. Self-assessment and evaluation, information sharing (related to mid-term plan[15])

Promote self-assessment and evaluation, enhance evidence-based university management, and strengthen information dissemination, especially to students and industry, in order to gain further trust from the public.

Evaluation indicators

1. Publish periodically an integrated report based on the results of self-assessment and evaluation, and a cost and impact analysis by the Strategic Management Office, and create opportunities for dialogue with students, industry, and other stakeholders approximately once a year, with the Tokyo Tech Advancement office playing a central role.

Measures

1. Conduct self-assessment and evaluation continuously across Tokyo Tech and at each School, institute, etc. based on an internal quality assurance system, and use the results to improve administrative operations and the quality of education and research.
2. Conduct a multifaceted analysis of the costs and impact of university management and the education and research at each School, institute, etc. through the activities of the Strategic Management Office, headed by the provost.
3. Communicate to the public the appeal and impact generated by the Institute through the activities of the Tokyo Tech Advancement office, led by the president, which develops public relations strategies for improving the branding and reputation of the Institute, plans strategic executive-level relationship building by the president, etc.
4. Publish an integrated report that disseminates both financial and non-financial information on the Institute's achievements and contributions to society, and engage in ongoing dialogue with students and industry.
5. Analyze stakeholder opinions, etc., and based on these analyses, realize effective management and administration operations at Tokyo Tech.

Standard

7. Virtuous cycle to enhance education and research

(related to mid-term plan[2])

The Institute aims to attract increased investment from industry and other sources, and to boost dramatically the driving force of the Tokyo Tech virtuous cycle of creating academic knowledge through outstanding education and research and returning this knowledge back into society through strategic collaboration with the public, as set forth in the Designated National University scheme and the vision for Tokyo Tech's management reforms. Additionally, the Institute will strive to obtain competitive funding, funding for industry-university collaboration, gifts, etc., and to effectively utilize its owned assets in order to secure financial resources for the future. Furthermore, the Institute will clarify how these resources should be invested in order to gain further trust from society.

Evaluation indicators

1. Increase the amount of funds to be invested strategically in Tokyo Tech education and research infrastructure, which will form the source of the Institute's "future intellectual assets," to approximately JPY 2 billion per annum by the final fiscal year of the 4th mid-term goals period.

Measures

1. Communicate to society the impact and appeal of Tokyo Tech activities, and utilize the resulting public trust to attract further HR and financial investment while strategically allocating obtained management resources back into education, research, and other foundations of the Institute. Invest in education, research, international collaboration, and other areas corresponding to infrastructure for knowledge and human resource creation, and particularly in areas for which acquisition of direct expenses is difficult through collaboration with society.
2. Gain recognition as an institution that provides the highest added value in terms of producing human resources, creating knowledge, and solving social issues, and attract investment from society based on this recognition.
3. Consider measures to secure financial resources not only for the redevelopment of Tamachi Campus but also for effective utilization of other assets owned by the Institute.
4. Identify areas that generate the highest added value based on dialogue with society and input from stakeholders, and develop long-term investment strategies for human resources, the environment, etc. that are related to these areas while naturally enhancing the role of the Institute as a public institution that produces outstanding human resources and creates basic and fundamental knowledge.
5. While keeping in mind that the source of Tokyo Tech's virtuous cycle lies in the daily activities of the Institute's faculty and staff members, and researchers, ensure that faculty and staff members always have the mental capacity and time to take on new challenges.

Standard

8. Utilizing ICT to enhance efficiency of operations

(related to mid-term plan[16])

Make full use of information and communication technology (ICT) and conduct university operations under a system that maintains an appropriate level of efficiency, transparency, safety, and continuity of operations in response to the social environment.

Evaluation indicators

1. Formulate a comprehensive basic strategy and action plan for digital transformation in fiscal year 2022 and implement these systematically from fiscal year 2023 onwards.

Measures

1. In addition to a basic strategy for digital transformation, which encompasses the following measures for advanced and secure use of ICT, formulate a more detailed plan to promote digital transformation systematically across the entire Institute.
2. Develop a fundamental communication system that supports improved efficiency, safety, etc. in university operations, and utilize this system extensively in accordance with appropriate usage norms.
3. Establish unified guidelines for the development and operation of work systems, and introduce a mechanism to ensure the efficiency and security of data integration between systems.
4. Maintain and improve a firm information security environment by promoting the training and assignment of human resources capable of appropriate information security management, not only in terms of systems but also on-site university operations.
5. Conduct work process reviews and operational reforms periodically in anticipation of the use of digital technology.
6. Appropriately select and operate a shared Institute-wide information infrastructure system that serves as the foundation for Tokyo Tech operations.
7. Establish an integrated or finely tuned support system for information infrastructure, which includes promotion of digital transformation.