



University of Tsukuba

Academic Year 2022-2023



Aiming to Create the New Value for the Future: GLOBAL TRUST



NAGATA Kyosuke

President of
the University of Tsukuba

The University of Tsukuba will celebrate its 50th anniversary in 2023. If we include our history starting from the Normal School, which was founded in 1872 by the newly established Meiji government as Japan's first institution of higher education, to the Tokyo University of Education, it has been 151 years since our foundation. Since our rebirth as a new concept university in 1973, we have tirelessly taken the initiative to realize a flexible education and research organization that is free from conventional ideas: we have created new structures necessary for changing times based on our founding philosophy of being open to the world. This has led to remarkable achievements, including three Nobel laureates, over 130 Olympic and Paralympic medals, many outstanding entrepreneurs, and membership in the RU 11, the group representing Japan's leading research universities.

The University of Tsukuba received Designated National University Corporation status this April at the beginning of our 4th Mid-term Goals and Plan period. A Designated National University Corporation is the designation by the Minister of Education, Culture, Sports, Science and Technology for national university corporations that are expected to pursue and conduct world-class education and research activities. Based on our founding philosophies of internationalization and trans-disciplinarity, we aim to become a "perfectly comprehensive university" that creates new knowledge for a better future. To this end, we are engaged in research and education that transcend the boundaries of disciplines, and are taking full advantage of our location in Tsukuba Science City to promote university-industry collaboration. Through these initiatives, we aim to create the new value of GLOBAL TRUST as a new basis for the society of the future in the post-COVID-19 era.

GLOBAL TRUST is a relationship based on trust between not only individuals or among individuals, organizations and society, but also includes trust among organizations, societies and countries. It is the cornerstone of our university's mission "to create knowledge that helps solve global issues and to nurture future leaders who can contribute to their resolution."

Concept

The University of Tsukuba aims to establish free exchange and close relationships in both basic and applied sciences with educational and research organizations and academic communities in Japan and overseas. While developing these relationships, we intend to pursue education and research to cultivate men and women with creative intelligence and rich human qualities.

The University of Tsukuba endeavors to contribute to the progress of science and culture. Formerly, Japanese universities tended to remain cloistered in their own narrow, specialized fields, creating polarization, stagnation in education and research and alienation from their communities.

The University of Tsukuba has decided to function as a university which is open to all within and outside of Japan. Toward this end, the University has made it its goal to develop an organization better suiting the functions and administration with a new concept of education and research highly international in character, rich in diversity and flexibility and capable of dealing sensitively with the changes occurring in contemporary society.

To realize this, it has vested in its staff and administrative authorities the powers necessary to carry out these responsibilities.

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University of Tsukuba Vision 2030 Creating new value of GLOBAL TRUST



The University of Tsukuba proudly announced its University of Tsukuba Vision 2030 on April 1, 2022. It describes our vision for the future as it should be and basic strategies for realization of that future. Creating new value of GLOBAL TRUST is a key concept that

runs through the vision. Based on this concept, we have redefined the University of Tsukuba as a university that will deepen its engagement with society and co-create a future society as it should be alongside our stakeholders, particularly our students.

SDGs Initiatives



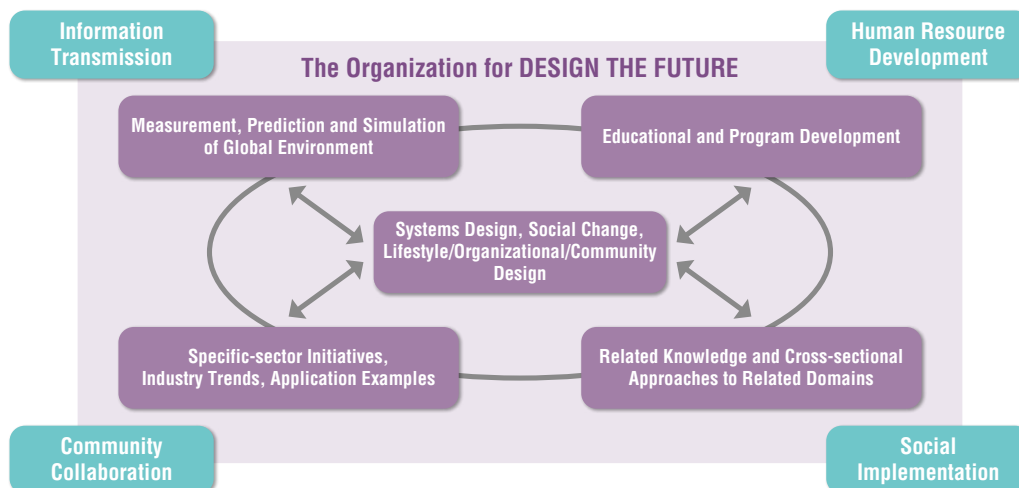
The University of Tsukuba brings an awareness to its educational and research goals of the importance of the UN 2030 Agenda's Sustainable Development Goals (SDGs), and the SDG credo of "no one left behind." Needless to say, the SDG objectives are deeply interconnected and inseparable. We have therefore established the Organization for DESIGN THE FUTURE to strategically promote and disseminate the University's findings and achievements.

The University has positioned seven of the 17 SDGs as core goals, and aims to contribute to the creation of a healthy future society for humanity and the Earth. We will achieve this by offering society tangible strategies, derived by integrating our diverse strengths as a comprehensive university, for solving global

environmental and social challenges. These include measurement and simulation; research and technology development contributing to problem solving; and lifestyle, organizational, community and systems design.



The seven SDGs that the Organization for DESIGN THE FUTURE will focus its efforts on



Diversity Promotion



Based on fundamental diversity principles, the University of Tsukuba was the first university in Japan to officially publish a set of Basic Principles and Guidelines on LGBT+ Inclusion at University of Tsukuba. We are working to enhance our educational and work environments to enable everyone included to demonstrate their individuality and abilities regardless of gender, nationality, age, or disability. These efforts have been recognized four times by the PRIDE Index GOLD rating issued by the volunteer organization work with Pride.

The University of Tsukuba established its Center

for Diversity, Accessibility and Career Development to structure a comprehensive support system for such initiatives as student career development, study support for students with disabilities, awareness-raising activities related to LGBTQ+ / SOGI*, and work-life balance for faculty and staff (life event support). The Center collaborates with related organizations on and off campus and benefits from active student participation.

*LGBTQ+ : Lesbian, Gay, Bisexual, Transgender, Queer/ Questioning etc.

SOGI : Sexual Orientation & Gender Identity



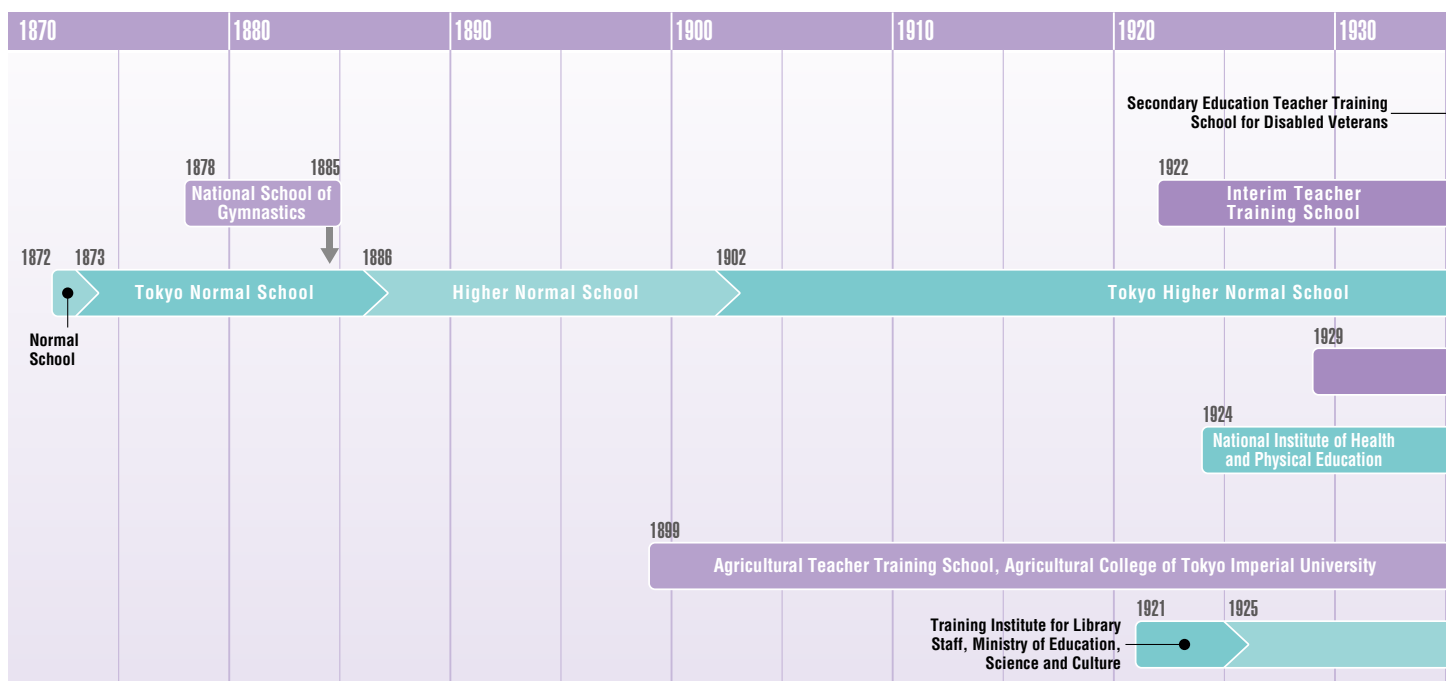
School Emblem



The University of Tsukuba's "five-and-three paulownia" crest derives from the emblem adopted by Tokyo Higher Normal School students in 1903 for their school badge, which was inherited by the Tokyo University of Education in 1949. Later, in 1974, the University Council officially approved the crest as the school insignia of the University of Tsukuba. The "five-and-three paulownia" design is based on a traditional Japanese motif, but brings a unique variation to the classic style: the University of Tsukuba crest is different because only the outline of the flowers is depicted. The color of the crest is CLASSIC PURPLE, the official color of the University of Tsukuba.

History

The University of Tsukuba was established in October 1973, due to the relocation of its antecedent, the Tokyo University of Education, to the Tsukuba area. As the new concept comprehensive university in Japan to be established under a country-wide university reform plan, the University has featured "Openness" with "New Systems for Education and Research" under a "New University Administration." The university reform plays a major role in our continuing effort for improvement. We are striving to create a unique, active, and internationally competitive university with superlative education and research facilities.



As the Hub of Tsukuba Science City

Tsukuba Science City is the largest leading-edge R&D center in Japan. The city boasts of more than 30 national research institutions, or about 30% of all national research institutes, and over 20,000 researchers are engaged in various research activities. The University of Tsukuba plays a central role in the city, aiming to create a new center for industry-academia-government collaboration that will generate innovation.

Nobel Prize Winners

● 1965 Prize in Physics



TOMONAGA Sin-Itiro

Professor Emeritus,
former president of Tokyo
University of Education

Awarded the 1965 Nobel Prize
in Physics, for his fundamental
work in quantum electrodynamics,
with profound consequences
for the physics of elementary
particles.

● 1973 Prize in Physics



ESAKI Leo

Professor Emeritus,
former President of the
University of Tsukuba

Awarded the 1973 Nobel Prize
in Physics, for the experimental
discoveries regarding tunneling
phenomena in semiconductors
and superconductors.

● 2000 Prize in Chemistry



SHIRAKAWA Hideki

Professor Emeritus

Awarded the 2000 Nobel
Prize in Chemistry, for the
discovery and development
of conductive polymers.

Total Number of Medals Won at the Olympic and Paralympic Games

● Olympic[※]



6



9



14

● Paralympic[※]



16

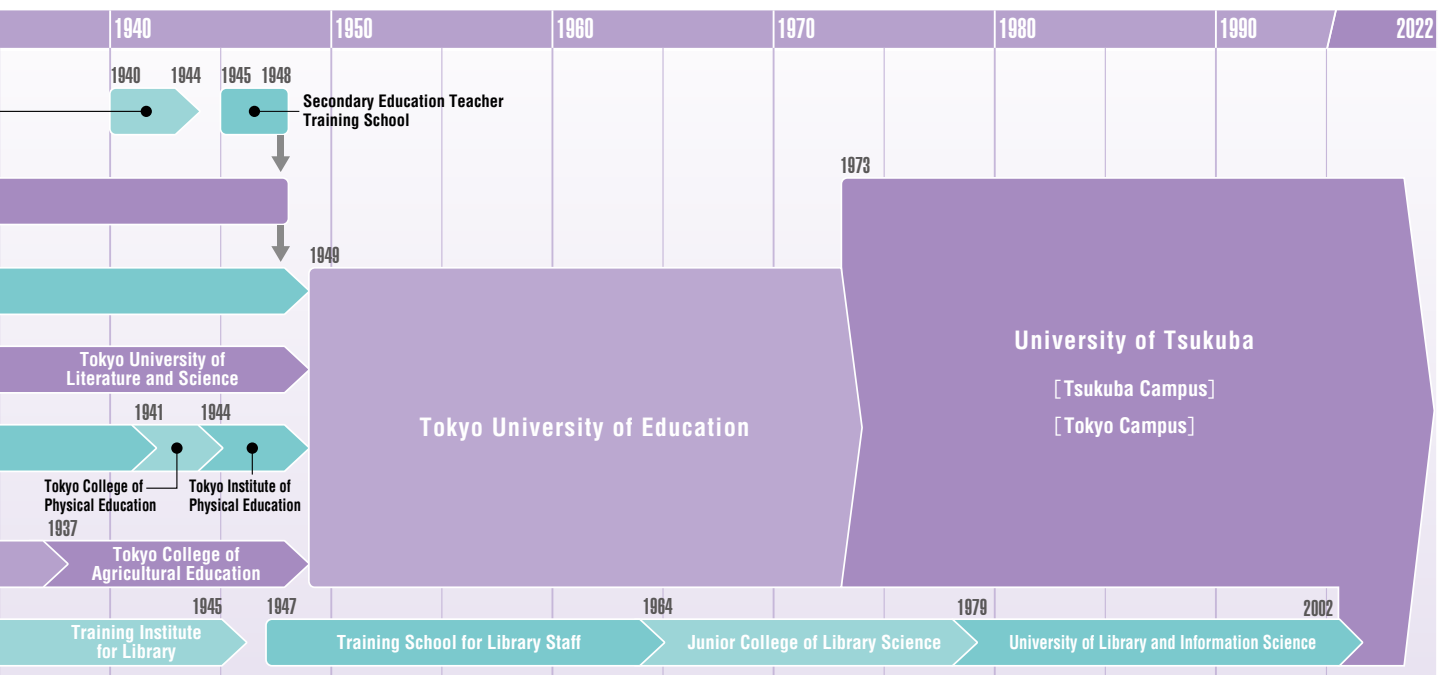


24



26

※ Number of students, graduates, teachers, etc. from the University and its affiliated schools since 1973.





Students have plentiful opportunities to build up a broad liberal education by learning from many accessible disciplines in various schools and colleges — covering medicine, sports, and arts — outside their chosen majors.

Basic Education Policies

The University of Tsukuba promotes an educational method backed by a wide range of cutting-edge research results, enhancing students' individuality and abilities while nurturing their potential to shape the future

with both independence and social capabilities. We also accept diverse students from all over the world, and through learning together with them, we nurture human resources who can play an active role in the world.

Nurturing highly-skilled intellectuals through "Transferable Skills Education"

The University of Tsukuba has established an educational system known as "transferable skills education" to nurture highly-skilled intellectuals with well-balanced general knowledge and skills. These skills and knowledge encompass ethics, humanity, logic, internationalism, communication skills, a rich physical and mental foundation, and management, planning and coordination skills, in addition to a comprehensive

intellectual foundation gained through the acquisition of highly specialized knowledge.

The University has Undergraduate Schools and Colleges, and Graduate Schools and Programs.

Making the most of the diversity of academic fields, the University's educational system develops human resources equipped with problem solving abilities based on a broad academic perspective.

High-quality education based on TSUKUBA STANDARDS

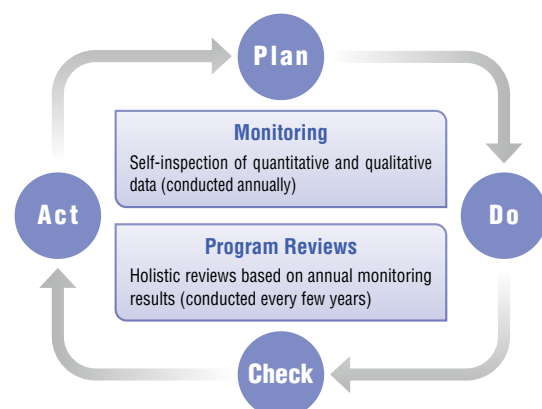
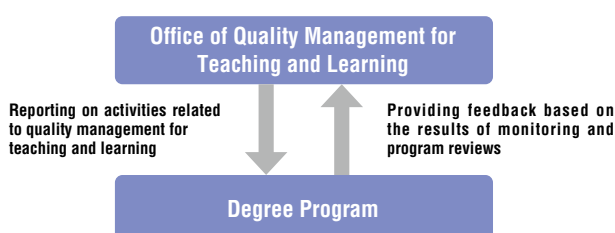
The University of Tsukuba has formulated two sets of Tsukuba Standards, one for Undergraduate Schools and Colleges and another for Graduate Schools and Programs. Together they have been announced as the University's declaration on education.

In addition to setting forth the educational purpose of each course and the University-wide measures for achieving them, the standards also clearly state the University's Diploma Policy and Curriculum Policy, as well as the measures for guaranteeing quality of education in each educational organization.



Guaranteeing quality of education through University-wide academic management

The Office of Quality Management for Teaching and Learning has been established to conduct annual monitoring, and program reviews that are conducted every few years.



Student-oriented Education through the Degree Program

The Degree Program is an educational program that specifies standards and abilities to be achieved according to the level of a degree (bachelor, master, doctoral, etc.) and its academic field, and is systematically designed to enable students to acquire these abilities.

In the traditional system where faculty members were assigned to educational organizations such as departments and graduate schools, it was difficult to respond flexibly to the demands of society and the needs of students because programs comprised the sum of classes offered by individual faculty members.

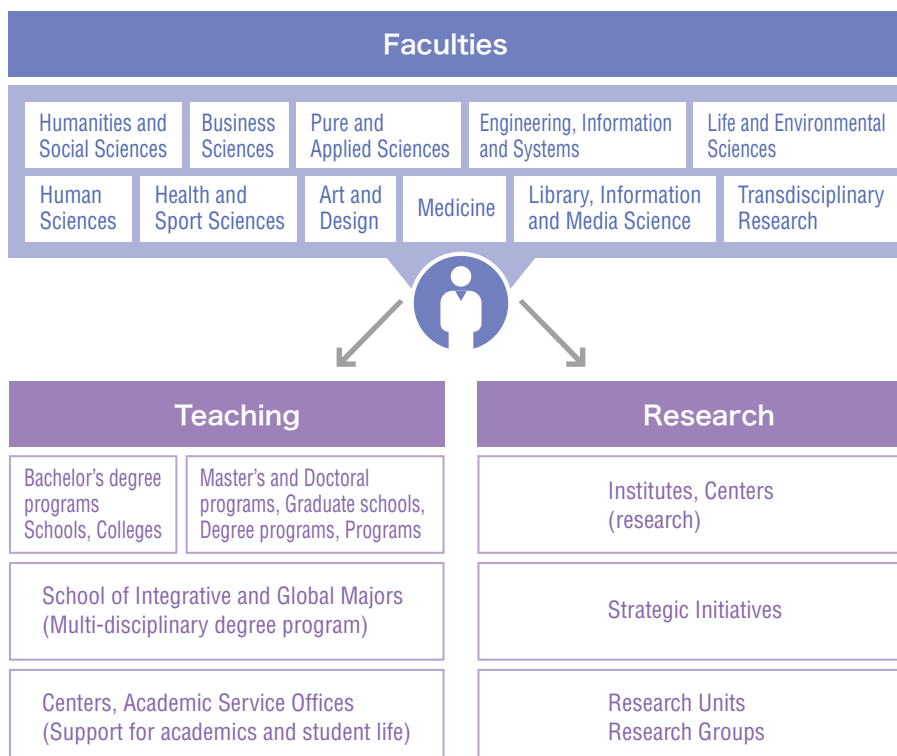
In contrast to this, the Degree Program is designed to provide education from the student's perspective, with faculty members gathering across the boundaries of internal and external organizations to create programs that are appropriate for their respective degrees, with degrees positioned as proof of the student's internationally compatible abilities.

An education system centered on the Degree Program makes it easier for students and society to identify the educational objectives, content, and outcomes of the University.

Interdisciplinary, Cross-disciplinary Education System

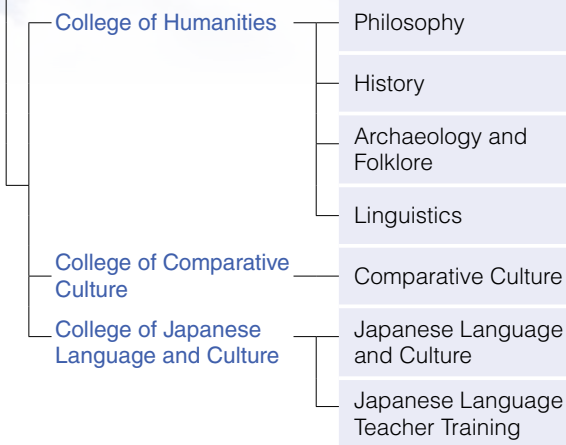
To accurately meet the needs of an ever-diversifying and ever-advancing environment, we are determined to ensure our academic and research organizations remain flexible and open, creating new programs and revamping organizations as appropriate to keep up with academic advancements and society's requirements.

To that end, we have introduced a new organizational structure: Educators are now affiliated with "faculties," which are separate from the academic and research departments, thus enabling educators from one faculty to teach courses in multiple departments.



Schools and Colleges (Undergraduate Courses)

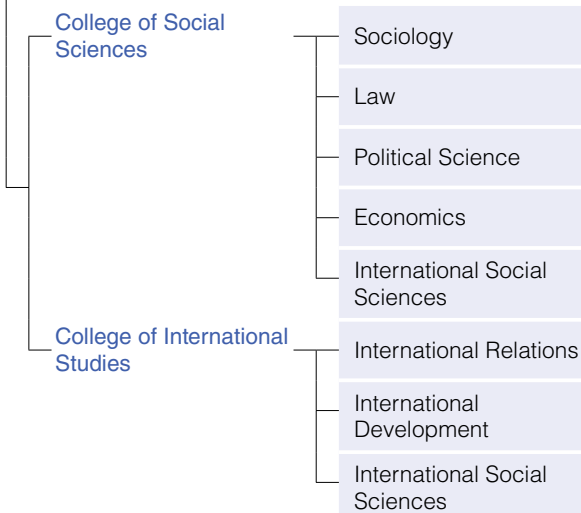
School of Humanities and Culture



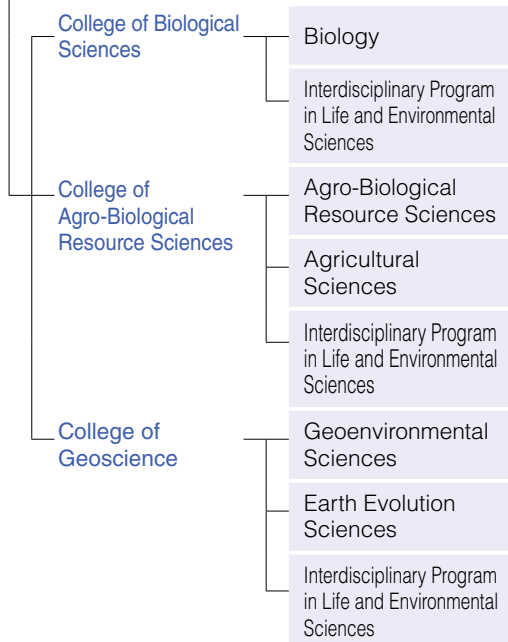
School of Human Sciences

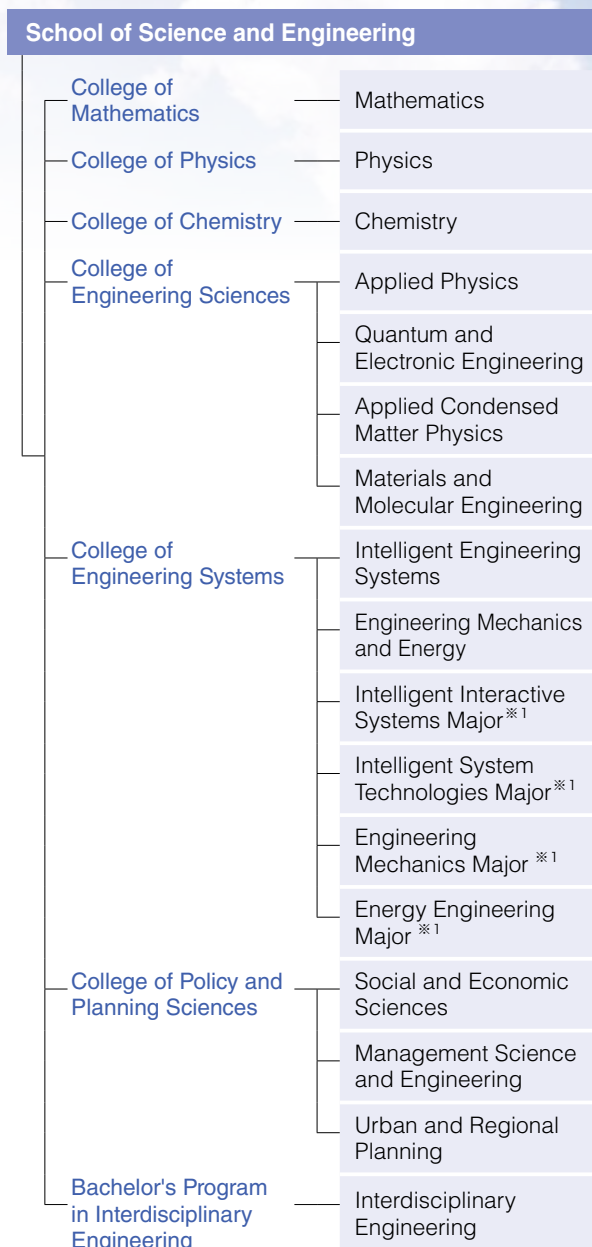


School of Social and International Studies

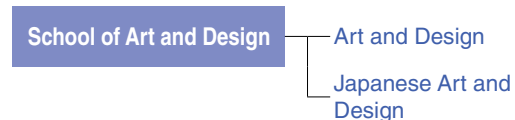
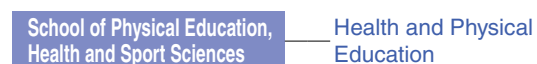
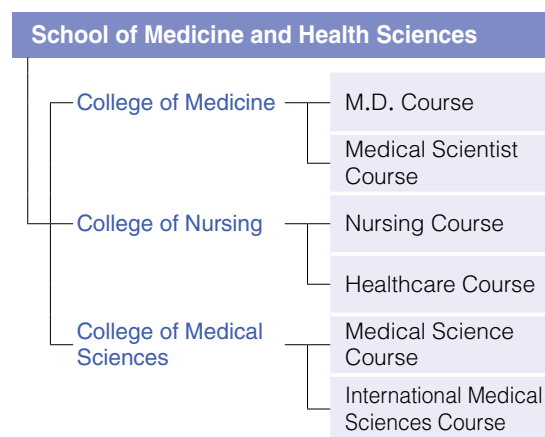
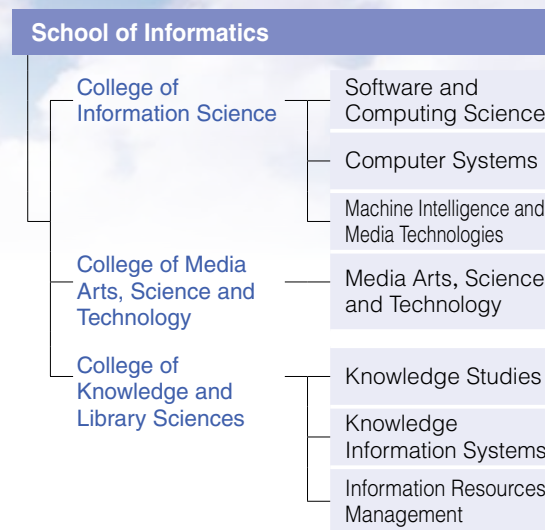


School of Life and Environmental Sciences





※1 This is for students enrolling until the 2020 academic year.



※2 After one year of multidisciplinary study, students move on to the second year of study in Schools and Colleges (excluding the School of Physical Education, Health and Sport Sciences) based on their own aspirations and grades.



Graduate Schools and Degree Programs

Graduate School of Business Sciences, Humanities and Social Sciences

Degree Programs in Humanities and Social Sciences

Humanities	M	D
International Public Policy	M	D
International and Advanced Japanese Studies	M	D

Degree Programs in Business Sciences

Law	M	D
Business Administration	M	D

<Professional Degree Programs> *1

Law School Program	P
MBA Program in International Business	P

Graduate School of Science and Technology

Degree Programs in Pure and Applied Sciences

Mathematics	M	D
Physics	M	D
Chemistry	M	D
Engineering Sciences	M	D
Materials Innovation	M	D

Degree Programs in Systems and Information Engineering

Policy and Planning Sciences	M	D
Service Engineering	M	
Risk and Resilience Engineering	M	D

Computer Science	M	D
Intelligent and Mechanical Interaction Systems	M	D
Engineering Mechanics and Energy	M	D
Empowerment Informatics		5D
Life Science Innovation: Bioinformatics	M	D

Degree Programs in Life and Earth Sciences

Biology	M	D
Agro-Bioresources Science and Technology	M	
Agricultural Sciences		D
Life and Agricultural Sciences		D
Bioindustrial Sciences		D
Geosciences	M	D
Environmental Sciences	M	
Environmental Studies		D
Mountain Studies	M	
Life Science Innovation: Food Innovation	M	D
Life Science Innovation: Environmental Management	M	D
Life Science Innovation: Biomolecular Engineering	M	D

<International Joint Degree Programs> *1

Joint Master's Degree Program in Sustainability and Environmental Sciences	M
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Graduate School of Comprehensive Human Sciences

Degree Programs in Comprehensive Human Sciences

Education	M	D
Psychology	M	D
Disability Sciences	M	D
Counseling	M	
Counseling Science		D
Rehabilitation Science	M	D
Neuroscience	M	D
Medical Sciences		4D
Nursing Science	M	D
Medical Sciences	M	
Public Health	M	
Human Care Science		D
Public Health		D
Sports Medicine		D
Physical Education, Health and Sport Sciences	M	
Sport and Olympic Studies	M	
Physical Education, Health and Sport Sciences		D
Coaching Science		D
Sport and Wellness Promotion	M	D
Art	M	D
Design	M	D
Heritage Studies	M	D
Informatics	M	D
Human Biology		5D

Life Science Innovation: Disease Mechanism	M	D
Life Science Innovation: Drug Discovery	M	D

<Domestic Joint Degree Programs> ※1

Joint Master's Program in International Development and Peace through Sport	M	
Joint Doctoral Program in Advanced Physical Education and Sports for Higher Education		D

<International Joint Degree Programs> ※1

International Joint Degree Master's Program in Agro-Biomedical Science in Food and Health	M	
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School of Integrative and Global Majors (SIGMA)

SIGMA aims to direct and administer undergraduate and graduate interdisciplinary degree programs.

Bachelor's Program in Global Issues	B	
Ph.D. Program in Humanities ※2		5D

B bachelor's program

M master's program

D post-master's 3-year doctoral program

5D 4-year doctoral program in medicine

4D post-bachelor's 5-year doctoral program

P professional degree program

※1 Professional degree programs, international joint degree programs with overseas universities, and domestic joint degree programs with universities in Japan are established under the Graduate School.

※2 A doctoral program that combines world-class educational and research capabilities with the University's unique strengths at its core.



Degree Programs in English

Undergraduate Courses

Social and International Studies

Undergraduate Program of International Social Studies	B
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Life and Environmental Sciences

Interdisciplinary Program of Life and Environmental Sciences	B
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Medicine and Medical Sciences

Undergraduate Medical Science Program for International Students	B
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Science and Engineering

Bachelor's Program in Interdisciplinary Engineering	B
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Graduate School of Business Sciences, Humanities and Social Sciences

Degree Programs in Humanities and Social Sciences

International Public Policy	M	D
International and Advanced Japanese Studies	M	D

<Professional Degree Programs>

MBA Program in International Business	P
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Graduate School of Science and Technology

Degree Programs in Pure and Applied Sciences

Mathematics		D
Physics	M	D
Chemistry	M	D
Engineering Sciences	M	D
Materials Innovation	M	D

Degree Programs in Systems and Information Engineering

Policy and Planning Sciences		D
Risk and Resilience Engineering		D
Computer Science	M	D
Intelligent and Mechanical Interaction Systems		D
Engineering Mechanics and Energy	M	D
Empowerment Informatics		5D
Life Science Innovation: Bioinformatics	M	D

Degree Programs in Life and Earth Sciences

Biology	M	D
Agro-Bioresources Science and Technology	M	
Agricultural Sciences		D
Life and Agricultural Sciences		D
Bioindustrial Sciences		D
Geosciences		D
Environmental Sciences	M	
Environmental Studies		D
Life Science Innovation: Food Innovation	M	D



Life Science Innovation: Environmental Management	M	D
Life Science Innovation: Biomolecular Engineering	M	D

<International Joint Degree Programs>

Joint Master's Degree Program in Sustainability and Environmental Sciences	M
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Graduate School of Comprehensive Human Sciences

Degree Programs in Comprehensive Human Sciences

Education	M
Medical Sciences	4D
Medical Sciences	M
Public Health	M
Sport and Olympic Studies	M
Design	M D
Heritage Studies	M D
Informatics	M D
Human Biology	5D
Life Science Innovation: Disease Mechanism	M D
Life Science Innovation: Drug Discovery	M D

<Domestic Joint Degree Programs>

Joint Master's Program in International Development and Peace through Sport	M
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<International Joint Degree Programs>

International Joint Degree Master's Program in Agro-Biomedical Science in Food and Health	M
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School of Integrative and Global Majors

Integrative and Global Majors

Bachelor's Program in Global Issues	B
Ph.D. Program in Humanities*	5D

*Selected for the Ministry of Education, Culture, Sports, Science and Technology's WISE Program in AY 2018

Degree Programs in Japanese

Japan-Expert Program

(Japanese-taught undergraduate degree program tailored to international students' needs)

Agricultural Science	B
Healthcare	B
Japanese Art and Design	B
Japanese Language Teacher Training	B

- B** bachelor's program
- M** master's program
- D** post-master's 3-year doctoral program
- 4D** 4-year doctoral program in medicine
- 5D** post-bachelor's 5-year doctoral program
- P** professional degree program



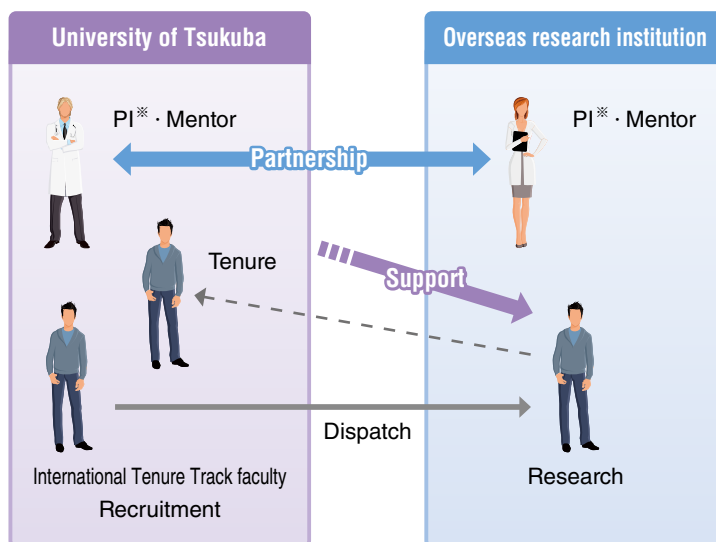


As a research-oriented university with advanced research capabilities in a wide range of academic fields, we deliver outstanding education and research by actively promoting interdisciplinary collaboration as well as deepening expertise in each field.

Efforts to Strengthen Research Functions

International Tenure Track system

International Tenure Track faculty members get tenured faculty after having undertaken advanced research at an overseas research institution for a few years while being co-supervised by Principal Investigators (PIs) who lead their own laboratories at the University of Tsukuba and overseas. They turned out to produce highly influential research results (papers) and to expand their international research collaborations.

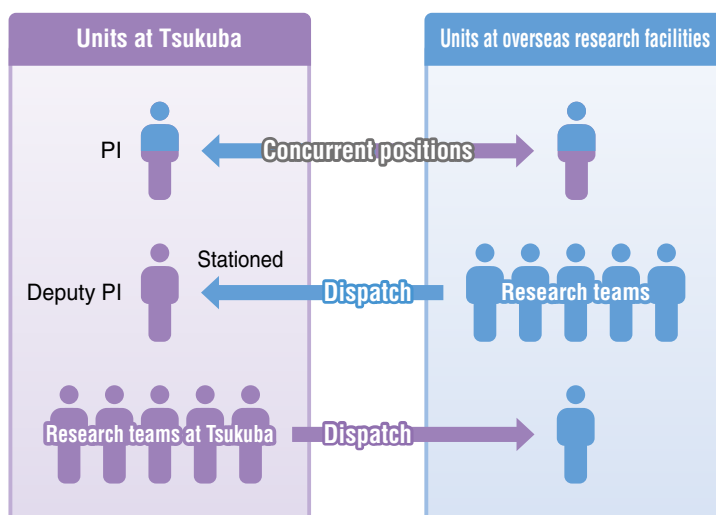


※PI : Principal Investigator

Overseas education and research units

This project invites laboratories from overseas universities and research institutes to our campus. We aim to strengthen international joint research and increase the number of international co-authored papers.

The period of the invitation is five years in principle, and the principal investigator (PI) of the laboratory from the overseas research institution is also appointed as a faculty member. The deputy PI is stationed at the University. At the same time, researchers from Tsukuba research groups are dispatched to overseas research institutions.



Developing "transborder" researchers

TRiSTAR, a leading development program engaging universities, national laboratories, and companies, is a part of the MEXT's Strategic Professional Development Program for Young Researchers to foster "transborder" researchers who can uncover new potential beyond their own expertise and across the boundaries between research fields and industries.

This program aims to develop outstanding researchers who have (1) the ability to deepen their research based on original and cutting-edge research with a long-term vision, (2) the ability to harness the potential of their specialized field to lead to co-creation with other fields and industries, and (3) the ability to expand their field of expertise and to unite and lead a research group.

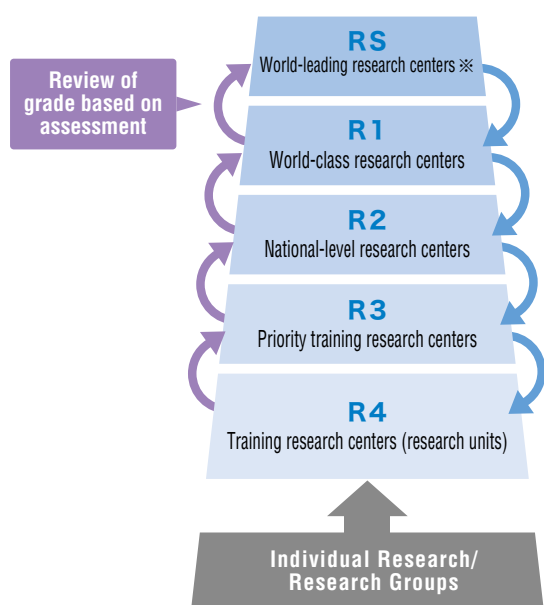
Taking full advantage of the strengths of Tsukuba Science City, one of Japan's leading research environments, we will develop and demonstrate a world-leading training program that transcends the barriers between all research fields through collaboration among universities, national laboratories, and companies. In addition, by building a systematic support system for "transborder" research activities and establishing Cutting-Edge in Campus (CEiC), which provides a forum for sharing the latest technologies and a culture of human resource development with companies, we will promote access to the world's top researcher networks, as well as diversity and inclusion, and the protection and promotion of intellectual property.

Research circulation system

We operate a research circulation system to promote effective research according to its progress. In order to stimulate the University's research overall, research centers are classified as Advanced Research Centers or Research Support Centers according to their function. Advanced Research Centers are further classified by level as RS (World-leading research centers), R1 (World-class research centers), R2 (National-level research centers), R3 (Priority training research centers), and R4 (Training research centers (research units)).

These accreditations are reviewed every five years and resources are allocated in a strategic and prioritized manner.

In addition, each research center is evaluated every five years (with an interim evaluation in the third year), which contributes to the stimulation of the center's research activities.



By function	Advanced Research Centers	Research Support Centers
By classification	RS World-leading research centers*	No classification
	R1 World-class research centers	
	R2 National-level research centers	
	R3 Priority training research centers	
	R4 Training research centers (research units)	

* Installed in February 2022
Accreditation of centers will be based on future evaluations

Cutting-edge Research That Will Change the World

Under the University's "Research Circulation System," there are currently three Advanced Research Centers that have been certified as World-class research centers (R1): the International Institute for Integrative Sleep Medicine, the Center for Computational Sciences,

and the Life Science Center for Survival Dynamics. In collaboration with universities and research institutes in Japan and abroad, we are actively exploring new academic fields.

International Institute for Integrative Sleep Medicine (IIS)

We spend nearly one-third of our lives asleep. However, the fundamental principles of sleep/wake biology are still unknown. Our director, YANAGISAWA Masashi, discovered the neuropeptide orexin and its prominent role in sleep/wake regulation, which has generated a highly active research field in the neurobiology of sleep. To aim at deciphering the mysteries of sleep, we endeavor by multidisciplinary approaches across basic biology, including molecular genetics, neuroscience, and physiology, as well as data engineering, drug discovery, and human sleep physiology.

Latest Research Results

- ▶ **Rapid eye movement sleep is initiated by basolateral amygdala dopamine signaling in mice.**
Science 6584, 994-1000(2022).
[Assistant Professor HASEGAWA Emi et al.]
- ▶ **A discrete neuronal circuit induces a hibernation-like state in rodents.**
Nature 583, 109-114(2020).
[Professor SAKURAI Takeshi et al.]

Center for Computational Sciences (CCS)

Computational science is the third approach to scientific discovery and is driven by computational simulations of physical phenomena. It aims to solve problems that were not possible with traditional theory and observation.

Using the University's own PAX/PACS series systems of supercomputers, we promote research on high-speed simulations and large-scale data analysis in a variety of scientific research fields, the development of high-performance computing systems and high-speed network technologies, and their application methods.

Latest Research Results

- ▶ **A 400 Trillion-Grid Vlasov Simulation on Fugaku Supercomputer: Large-Scale Distribution of Cosmic Relic Neutrinos in a Six-dimensional Phase Space.**
SC'21: Proceedings of the International Conference for High Performance Computing, Networking, Storage and Analysis 5, 1-11(2021).
[Associate Professor YOSHIKAWA Kohji et al.]
- ▶ **Dinoflagellates with relic endosymbiont nuclei as novel models for elucidating organogenesis.**
Proceedings of the National Academy of Sciences of the United States of America 117(10), 5364-5375(2020).
[Professor INAGAKI Yuji et al.]

Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA)

Aiming to elucidate the fundamental mechanisms that support the survival, adaptation, symbiosis, and evolution of life, we promote research in the areas of metabolism, immunity, circulation, and reproduction, while integrating this research to conduct life dynamics research not only at the individual but also the population level.

Under a dynamic research system in which medical, biological, agricultural, pharmaceutical, health, and other sciences collaborate with each other, we will elucidate the unknown aspects of life and uncover the hidden survival strategies of living organisms.

Latest Research Results

- ▶ **Molecular action of larvicidal flavonoids on ecdysteroidogenic glutathione S-transferase Noppera-bo in *Aedes aegypti*.**
BMC Biology 1, 43(2022).
[Professor NIWA Ryusuke et al.]
- ▶ **Offspring production from cryopreserved primordial germ cells in *Drosophila*.**
Communications Biology 1, 1159(2021).
[Professor KOBAYASHI Satoru et al.]

- ▶ Induction of narcolepsy-like symptoms by orexin receptor antagonists in mice.

SLEEP 8(2021).

[Assistant Professor KAUSHIK Mahesh Kumar et al.]

- ▶ Sparse Activity of Hippocampal Adult-Born Neurons during REM Sleep is Necessary for Memory Consolidation.

Neuron 107, 552-565(2020).

[Associate Professor SAKAGUCHI Masanori et al.]



- ▶ Unravelling the intertwined atomic and bulk nature of localised excitons by attosecond spectroscopy.

Nature Communications 12(1), 1021(2021).

[Assistant Professor SATO Shunsuke et al.]

- ▶ Japan's south foehn on the Toyama Plain: Dynamical or thermodynamical mechanisms?

International Journal of Climatology, 41(11), 5350-5367(2021).

[Professor KUSAKA Hiroyuki et al.]



- ▶ Contribution of PDGFR α -positive cells in maintenance and injury responses in mouse large vessels.

Scientific Reports 1, 8683(2021).

[Professor YANAGISAWA Hiromi et al.]

- ▶ High-resolution structure of phosphoketolase from *Bifidobacterium longum* determined by cryo-EM single-particle analysis.

Journal of Structural Biology 2, 107842(2021).

[Professor IWASAKI Kenji et al.]



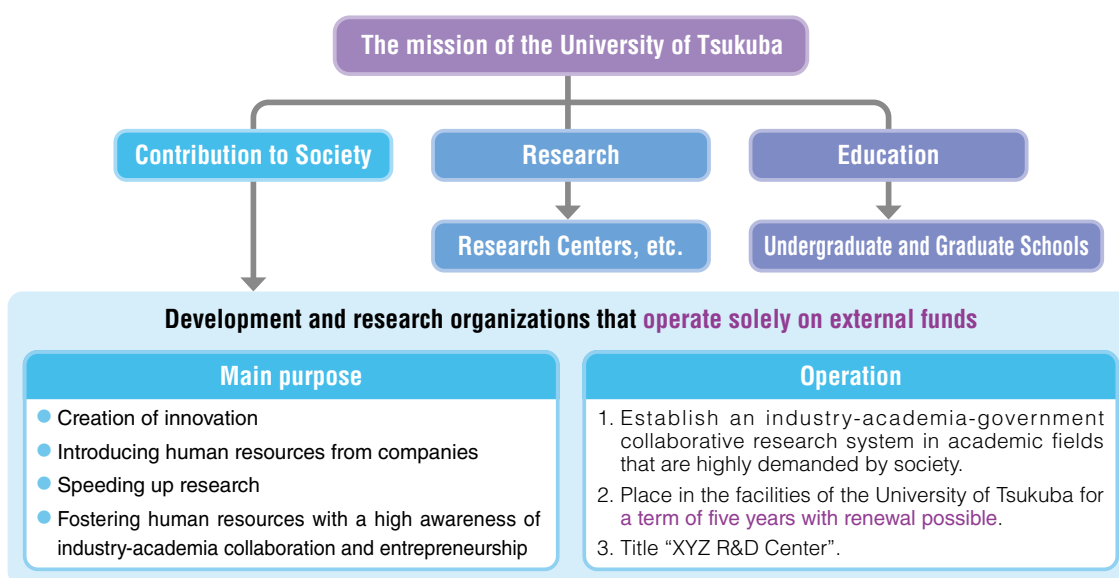


The University promotes corporate needs-driven joint research with companies. In addition, in order to continuously and autonomously realize the social implementation of research results and the supply of entrepreneurial human resources to society, we aim to build a system that circulates funds and human resources through entrepreneurial education, entrepreneurial support, and venture growth.

Promoting Joint Research Driven by Corporate Needs

Research & Development Centers (R&D Centers)

R&D Centers, which manage projects solely with external funding, conduct joint industry-government-academia research in academic fields of high social demand. As of April 2022, 13 centers are in operation.



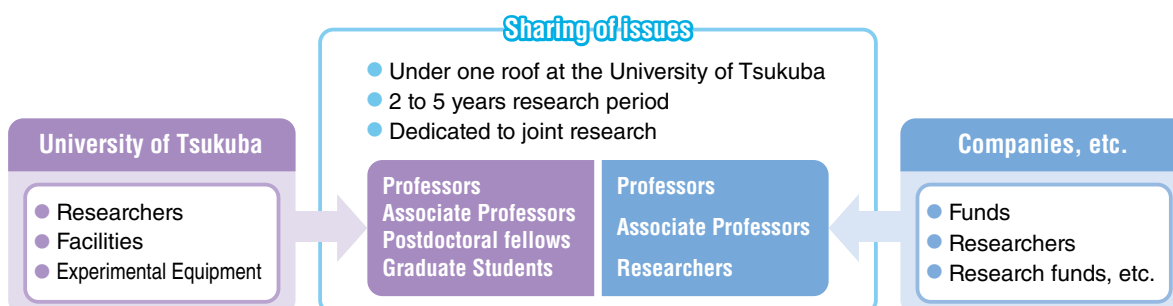
Special Joint Research

This system promotes the social implementation of outstanding research results through joint development and research on common issues on an equal footing between the University of Tsukuba faculty members and researchers from private companies and other organizations.

By employing researchers from companies as faculty

members of the University and promoting development and research activities flexibly and promptly, we ensure higher research capabilities compared to conventional joint research.

As of the end of March 2022, 12 projects have been conducted.

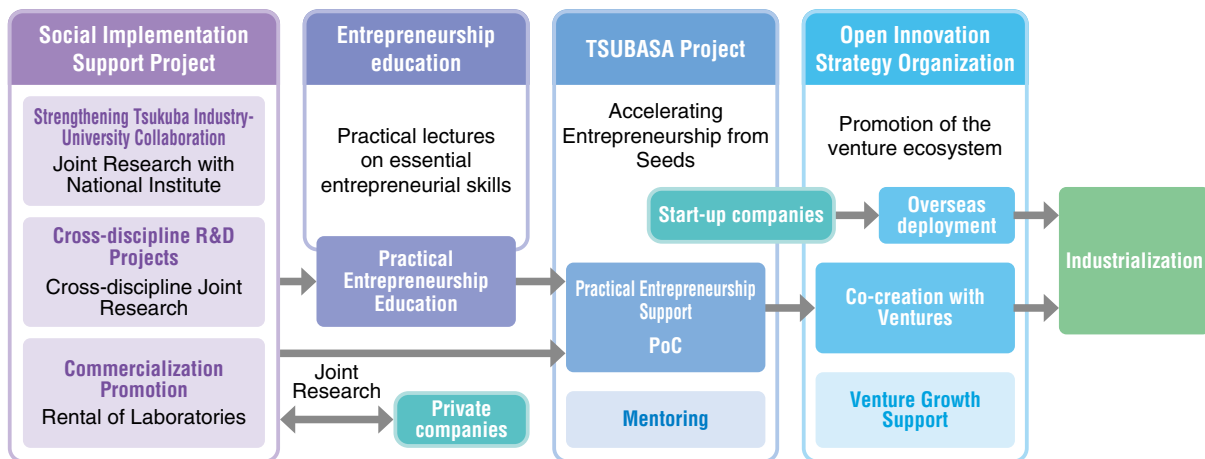


Promoting Support for the Creation of Startups and Social Implementation

Comprehensive Support System for the Creation of Startups and Social Implementation

The Social Implementation Support Project, which calls for on-campus applications, entrepreneurship education for researchers both inside and outside the University, and the START University Promotion and TSUBASA Project, promoting the creation of venture businesses, are both underway. The Open Innovation Strategy

Organization has been established as a management structure to promote large-scale joint research between industry and academia on an organization-to-organization basis. We provide comprehensive support for the social implementation of R & D results and entrepreneurship through these activities.

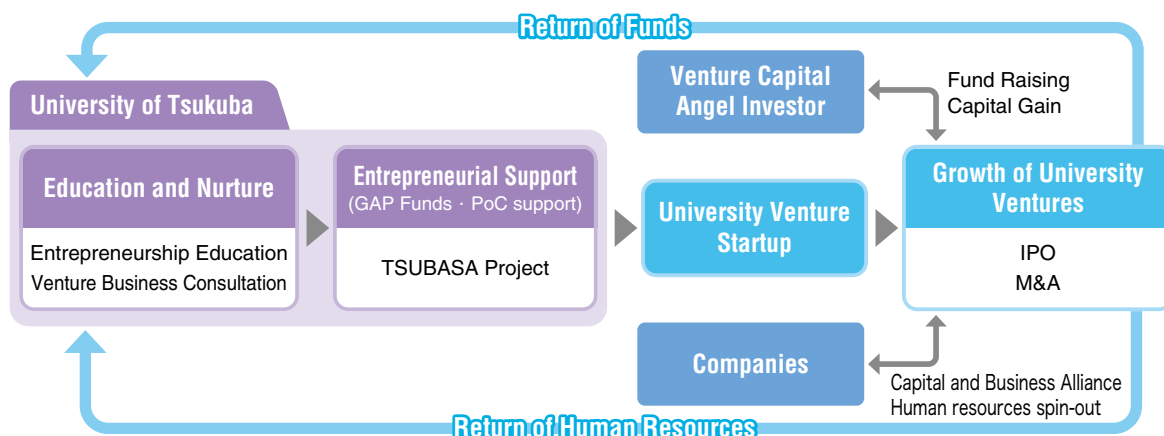


Venture Ecosystem

Aiming to build a "venture ecosystem" to continuously and autonomously realize social implementation of research results and supply of entrepreneurial human resources to society, we provide entrepreneurship education through classes, operate a comprehensive consultation service for entrepreneurship, provide GAP

funds and PoC support, and support university ventures by students and faculty members.

A "venture ecosystem" aims to create further university-launched ventures following the growth of university-launched ventures and the subsequent return of funds and human resources to the University.





At the University of Tsukuba, we seek to raise our academic and research standards as well as to foster a global perspective in our students through international academic exchange. Thus, we dispatch our students and faculty members overseas based on our exchange agreements with international institutions, provide a credit transfer system, and accept international faculty members and researchers. We also actively welcome students from all around the world.

Overseas Offices

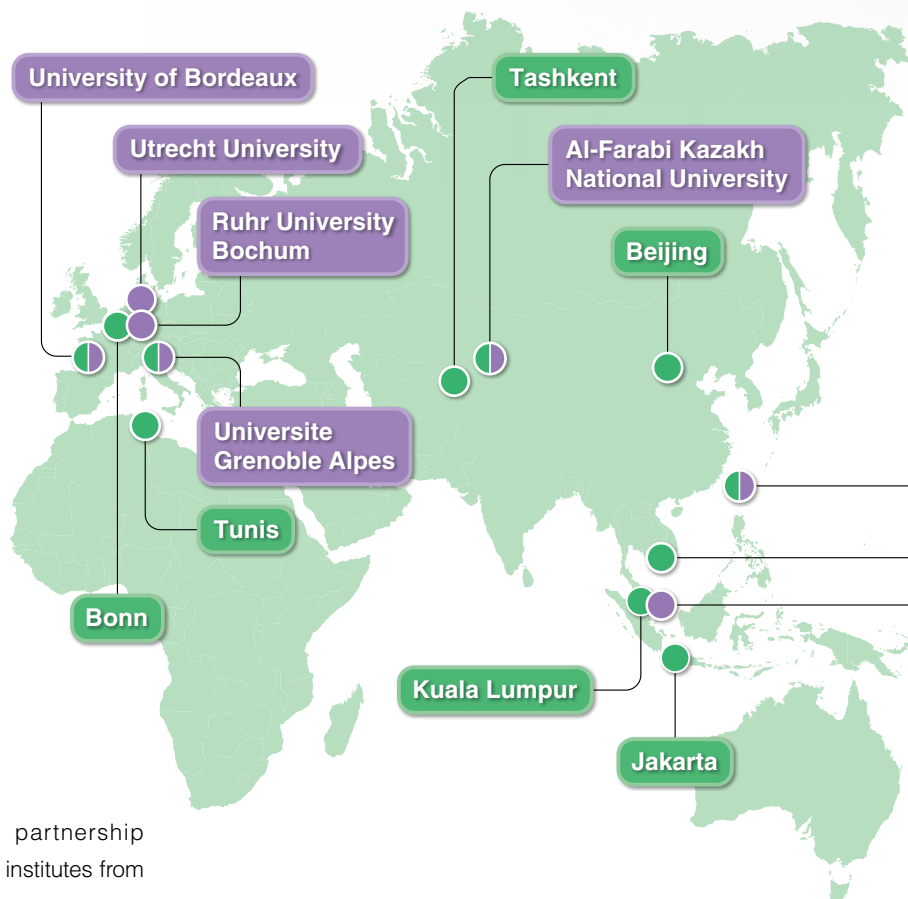
13 offices in 12 countries and regions※

※Some are located in CiC partner universities

The University of Tsukuba's wide-ranging efforts to promote international ties include the operation of overseas offices to pursue international academic and research opportunities in the relevant country or region. At present, there are 13 offices in 12 countries and regions, each of which is charged with recruiting international students, supporting our students overseas, promoting and supporting academic exchange activities with our partner institutions, and building alumni networks.

Campus-in-Campus ★

10 universities in 8 countries and regions



Overseas Partner Universities

The University of Tsukuba has signed 381 partnership agreements with other universities and research institutes from 69 countries and regions (10 Campus-in-Campus agreements, 173 inter-university exchange agreements, and 198 inter-departmental exchange agreements). (As of May 1, 2022)

Initiatives for Transborder University

Top Global University Project

Under the Top Global University Project launched by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2014, the University of Tsukuba was selected as one of the Type A (Top Type) universities which conducts world-leading education and research. Through Campus-in-Campus Initiative and Course Jukebox system, which represent the core elements of this project, we aim to make a leap from an “open university” to a “university that takes the lead in opening Japan’s higher education and society to the world”.

★Campus-in-Campus (CiC)

The CiC Initiative is a scheme of sharing campuses among CiC Partner Universities with the purpose of utilizing our respective research and educational resources without any national or institutional barriers.

Along with sharing classes and teaching staff via Course Jukebox system, as well as sharing labs, research, and educational units through joint appointments of research and staff, the CiC Initiative allows us to realize unfettered mobility of students, faculty, and staff members with CiC Partner Universities in the global education and research environment, even in the era of the new normal.

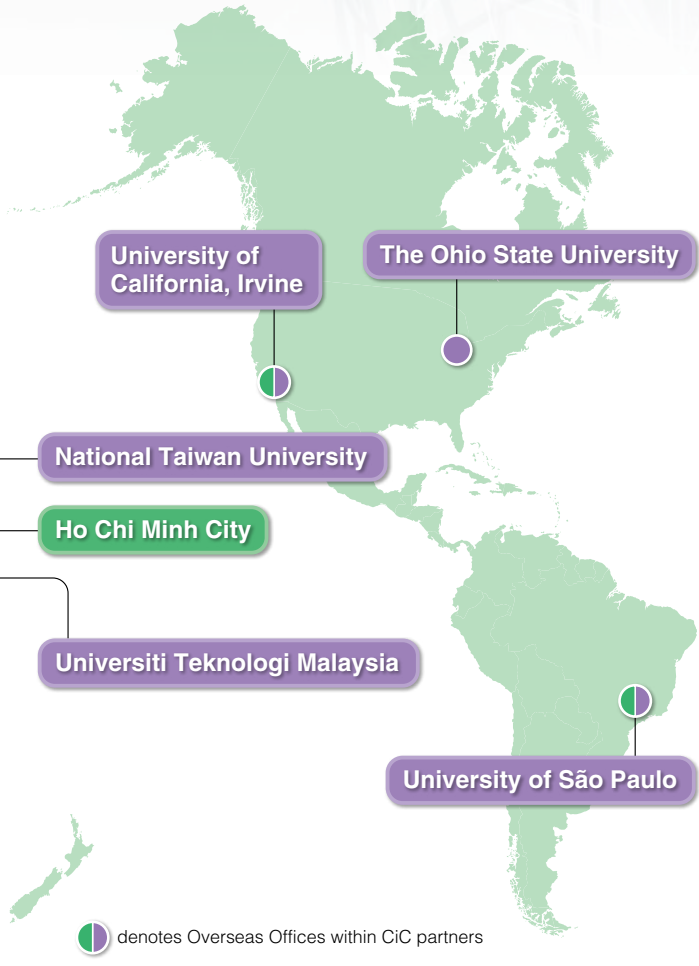


International Exchange Support

We provide a wide range of support for students to realize an internationally rich campus life. For students who wish to study abroad, we provide information on types of study abroad programs and scholarships. For international students, we provide a variety of support related to student life, such as scholarships and visa status, as well as counseling services in multiple languages to help them lead healthy lives, both mentally and physically.

In addition, we hold multilingual chats and cross-cultural exchange events (including online) in the Student Commons to help Japanese and international students better understand each other's language and culture. The Student Commons also provides a venue for Japanese and international students to gain a deeper understanding of each other's language and culture.

The outbreak of the COVID-19 has had a major impact on overseas study and accepting international students. Therefore, with the post-COVID-19 era, we are pursuing the promotion of international exchange by providing a variety of programs that meet students' needs, such as online education and hybrid study abroad programs, in combination with online and on-site programs.



Japan Virtual Campus (JV-Campus)

As part of the Top Global University Project, the University of Tsukuba is spearheading the Japan Virtual Campus (JV-Campus), an online education platform that promotes internationally competitive Japanese higher education contents to learners in Japan and overseas as well. As an international gateway to Japanese higher education resources coming from several institutions in Japan and overseas, we aim to provide appealing educational contents needed in the post-COVID-19 era and to lead in the creation of new learning together with learners all over the world.





Research Institutions & Centers

Advanced Research Centers

- Center for Computational Sciences
- Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance
- International Institute for Integrative Sleep Medicine
- Tsukuba-Plant Innovation Research Center
- Shimoda Marine Research Center
- Plasma Research Center
- Alliance for Research on the Mediterranean and North Africa
- Center for Cybernetics Research
- Center for Research in Isotopes and Environmental Dynamics
- Center for Artificial Intelligence Research
- Proton Medical Research Center
- Mountain Science Center
- Microbiology Research Center for Sustainability
- Advanced Research Initiative for Human High Performance
- Transborder Medical Research Center
- Tomonaga Center for the History of the Universe
- Tsukuba Research Center for Energy Materials Science
- Research Center for West Asian Civilization

Research Support Centers

- Research Facility Center for Science and Technology
- Academic Computing & Communications Center

Education and Student Support Service Centers

- Center for Education of Global Communication
- Sport and Physical Education Center
- Admission Center
- University Health Center

Institute for International Science Innovation

- Innovation Medical Research Institute

Institute for Joint Usage & Research

- Tsukuba Clinical Research & Development Organization

Research and Development Centers

- R&D Center for Precision Medicine
- R&D Center for Frontiers of MIRAI in Policy and Technology
- R&D Center for Sport Innovation
- R&D Center for Health Services
- R&D Center for Tailor-Made QOL
- R&D Center for Working Persons' Psychological Support
- R&D Center for Innovative Material Characterization
- R&D Center for Innovative Drug Discovery
- R&D Center for Digital Nature
- R&D Center for Wellness Innovation
- R&D Center for Smart Wellness City Policies
- R&D Center for Lifestyle Innovation
- R&D Center for Zero CO₂ Emission with Functional Materials

Umbrella Organization for Competitive Sports

- Athletic Department

Other Institutions

- Acupuncture and Physical Therapy Teacher Training School
- Institute for Comparative Research in Human and Social Sciences



University of Tsukuba Library



The University of Tsukuba Library consists of the Central Library and four specialized libraries (Art and Physical Education Library, Medical Library, Library on Library and Information Science and Otsuka Library) and supports the academic information infrastructure of the University of Tsukuba. Nearly one million people inside and outside the University have access to the University of Tsukuba Library. In addition to books and journals, systematically maintained E-books, E-journals and databases enable faculty members to access to a huge collection of materials and the latest academic information. There are also spaces available for classes, group learning and presentation of art works or research findings utilizing these library materials. The University of Tsukuba Library also holds special exhibitions of valuable materials. The

Central Library provides not only reference services and orientations but also learning supports and seminars by active graduate school students called "Learning Advisor" and guidance by volunteers.



University of Tsukuba Hospital

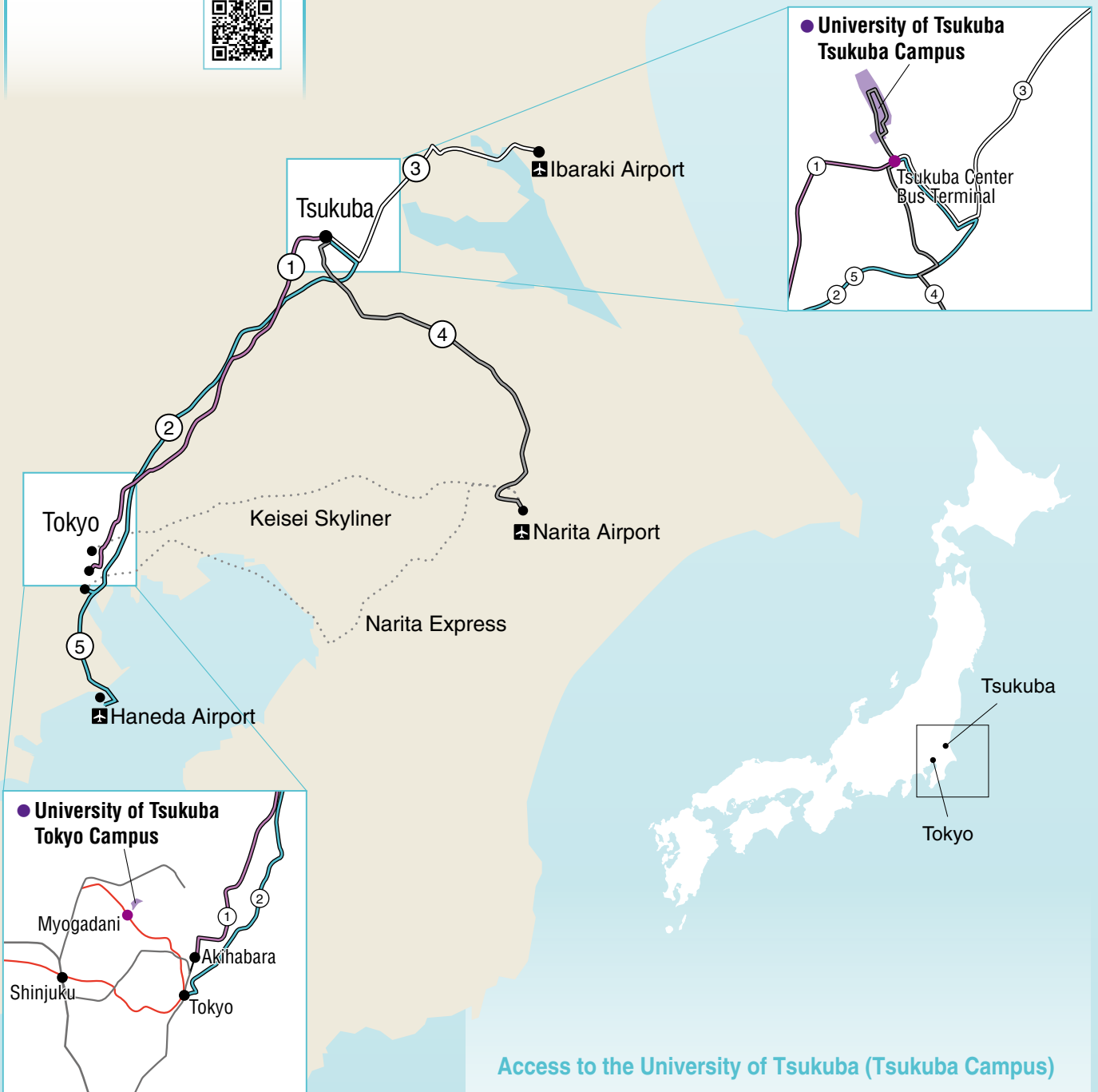


The University of Tsukuba Hospital is engaged in providing advanced medical care, nurturing excellent medical personnel and developing next-generation medical care in order to fulfill the three roles of "medical care, education and research" imposed on University Hospitals. As the only advanced treatment hospital in Ibaraki prefecture, the University of Tsukuba Hospital is accepting patients who need advanced medical care from all over the prefecture. Moreover, from the AY2019, as the only advanced emergency medical service center in the prefecture, the University of Tsukuba Hospital accepts patients with serious conditions



24 hours a day. In addition, the hospital has established local medical education centers and stations in all medical areas of the prefecture and is focusing on the development of medical personnel who has a high level of expertise and hospitality mindsets while cooperating with clinical environments in local communities. In 2015, the University of Tsukuba Hospital has established "T-CReDO (Tsukuba Clinical Research and Development Organization)" which aims to develop as an international clinical development base. T-CReDO provides a venue for conducting clinical trials and research in order to create innovative medicines, medical devices, regenerative medical products from various medical seeds in industry-academia-government research institutes centering around Tsukuba Science City as well as those in the University of Tsukuba.

Access



Access to the University of Tsukuba (Tsukuba Campus)

● Train

① Akihabara Sta. — Tsukuba Express (TX) — Tsukuba Sta. [45 min. by express train]

● Highway Express Bus

② Tokyo Sta. — Tsukuba Center — Tsukuba Daigaku Sta. [About 75 min.]

● Airport Bus

③ Ibaraki Airport — Tsukuba Center [About 60 min.]

④ Narita Airport — Tsukuba Center [About 60 min.]

⑤ Haneda Airport — Tsukuba Center [About 120 min.]

※To reach the University of Tsukuba, please take the "Tsukuba Daigaku Junkan (University of Tsukuba Campus Circular)" bus at Tsukuba Center Bus Terminal adjacent to TX Tsukuba Station.

IMAGINE THE FUTURE.

 筑波大学 *University of Tsukuba*



IMAGINE THE FUTURE.

150



創基151年
筑波大学50周年記念
50TH ANNIVERSARY OF
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Commemorating 151 Years since Inception
and the 50th Anniversary of the Establishment
of the University of Tsukuba



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Outline of the University

Academic Year 2022 - 2023

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305-8577, Japan

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