

Tokyo Tech

OVERVIEW

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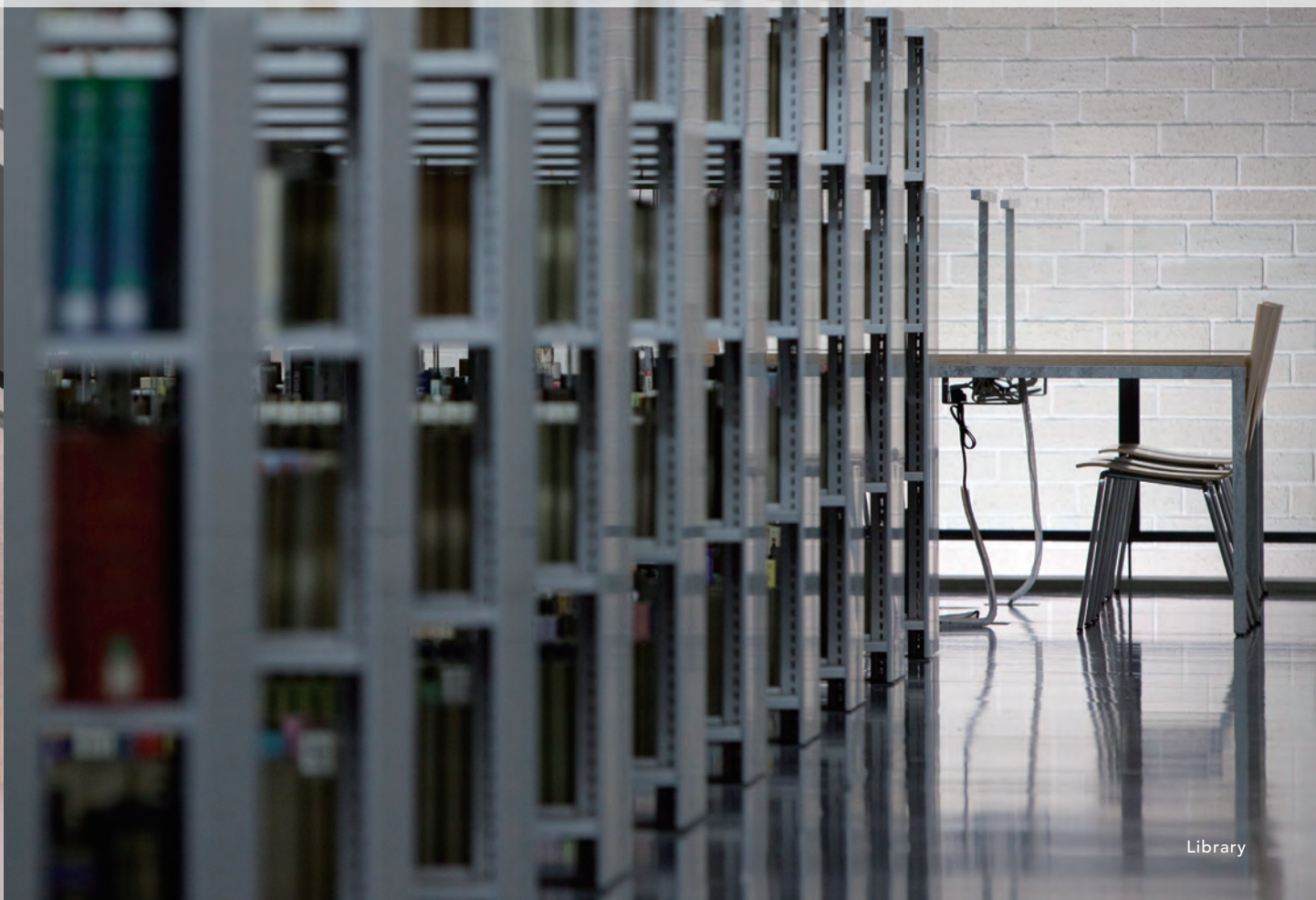
Cover photo: J2 and J3 Buildings, Suzukakedai Campus



Tokyo Institute of Technology

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*A world-class Institute
whose organization and members
continue to innovate*

Embracing challenge with spirit, enthusiasm, and confidence

For over 135 years, Tokyo Tech has been the driving force behind Japan's development by producing outstanding leaders and excellent research findings in the field of science and technology.

Under a revitalized education system implemented in April 2016, undergraduate and graduate schools have been joined to form new Schools. Research institutes have been reorganized, enabling faculty members to work closely as teams and perform to their full potential.

Tokyo Tech is an institute whose organization and members continue to innovate.



Yoshinao Mishima
President, Tokyo Tech

Cross-cutting research and education

In this era of rapid change, sustainable solutions to global challenges often require integrative approaches. With strong foundations in core areas of science and engineering and an extensive liberal arts component, Tokyo Tech provides students with an education that traverses disciplinary boundaries. The Institute's faculty members are front-line researchers who are making a difference in labs, classrooms, and the world.

Environment and Society

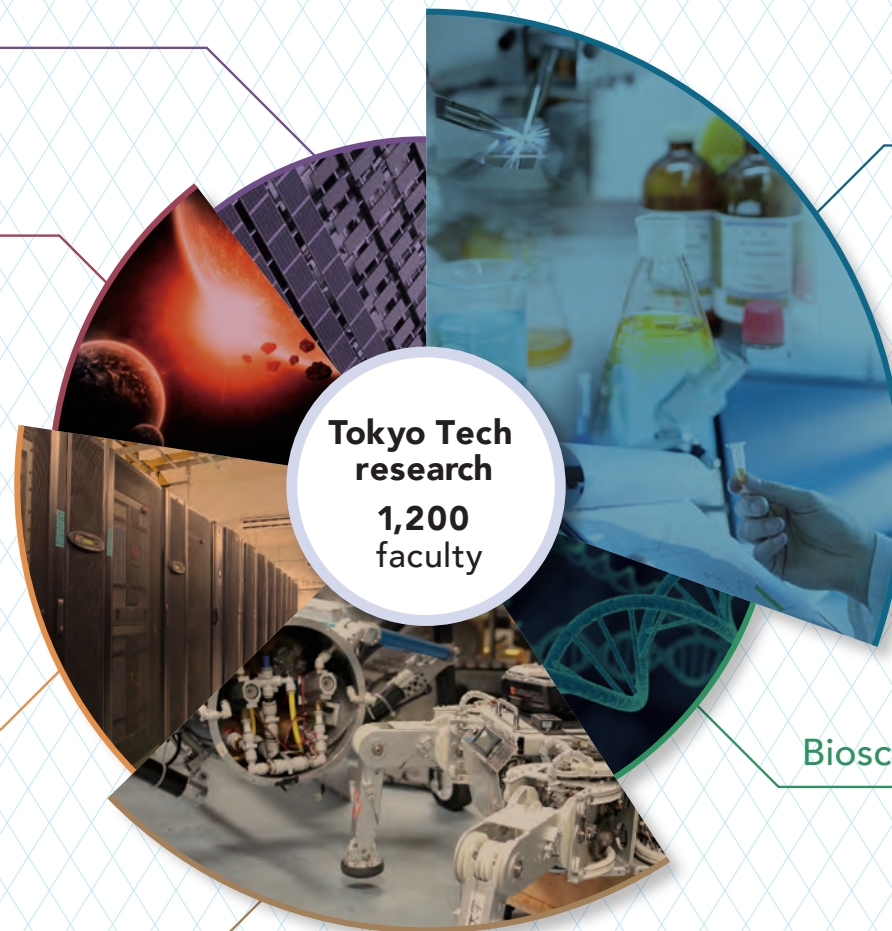
Physics, Mathematics,
and Earth and Planetary Sciences

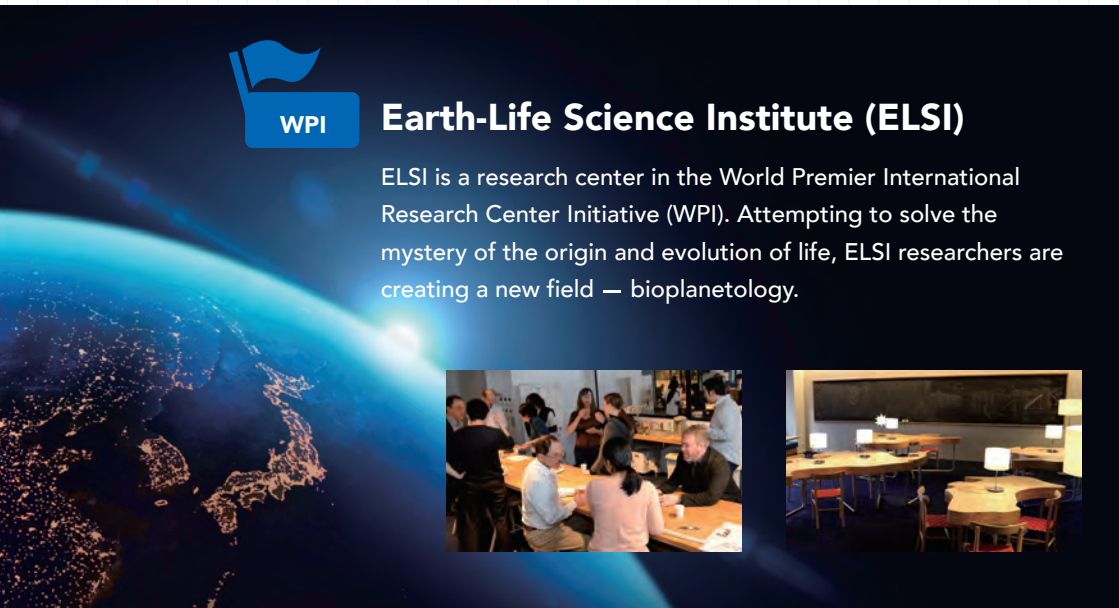
Electronics and
Information Technology


Mechanics and Architecture

Chemistry and Materials

Bioscience and Biotechnology









Earth-Life Science Institute (ELSI)

ELSI is a research center in the World Premier International Research Center Initiative (WPI). Attempting to solve the mystery of the origin and evolution of life, ELSI researchers are creating a new field — bioplanetology.






Industry relations


Create new industries and drive innovation

<h3>Collaborative Research</h3> <p>Tokyo Tech collaborates with private enterprises</p>	<h3>Sponsored Research</h3> <p>Private enterprises entrust research to Tokyo Tech</p>	<h3>Academic Consultations</h3> <p>Tokyo Tech faculty members provide academic consultations related to research</p>
<h3>Collaborative Research Chair Program</h3> <p>Joint founding of programs and facilities on campus</p>	<h3>Industry Liaison Programs</h3> <p>Programs tailored for member companies</p>	<h3>Industry-Sponsored Programs</h3> <p>Programs funded by donations</p>




Materials Research Center for Element Strategy (MCES)

MCES conducts research for the benefit of society through the creation of innovative materials using elements with high Clarke numbers, in other words, those abundant in Earth's crust.

Happiness Co-creation Society through "Ishin-Denshin" Intelligent Communications (HAPIC)


With the support of participating corporations and local governments, HAPIC aims to realize means of heart-to-heart communication which can interpret and convey people's minds as well as the on-site atmosphere.

TSUBAME supercomputer

TSUBAME, one of the top supercomputers in Japan, is available for Tokyo Tech students, faculty and staff members as well as private enterprises and research institutes.


TSUBAME-KFC/DL supercomputer was ranked 2nd in the November 2015 list of the world's most energy-efficient supercomputers, Green500.




Startups designated as Tokyo Tech Ventures

Riverfield, Inc.

Riverfield develops surgical assist robots which lessen the burden on doctors and patients.





Tokyo Tech Ventures

Startups making use of findings or technology resulting from research activities at Tokyo Tech are eligible to become "Tokyo Tech Ventures."

Students from around the world

Global Scientists and Engineers Program (GSEP)

GSEP is a four-year Bachelor of Engineering degree program for international students with a global perspective in transdisciplinary fields. Proficiency in the Japanese language is not required for admission as courses are taught in English.

The introductory Japanese language component of the program allows students to familiarize themselves with Japanese language and culture, something students are encouraged to do throughout the course of their studies.



International Graduate Program (IGP)

IGP is an opportunity for qualified international students with little or no knowledge of Japanese to pursue a master's or doctoral degree in Japan. With various academic disciplines participating in this program, students are able to find a lab in which to further their research, acquire broader knowledge and understanding, and conduct advanced long-term research in a field that best matches their interests and background.



GSEP application schedule

Application period	Notification of results	Admission
Early to late August	Mid-November	April

IGP application schedule by category

	Category	Program type	Deadline	Notification of results	Admission
1	Overseas application	IGP(A) Master's program, Doctoral program, Integrated Doctoral Education Program	Late November	Mid-March	September
2		IGP(B)2 Doctoral program	Mid-May	Mid-July	September
3		IGP(B)3 Doctoral program	Mid-January	Mid-March	September
4		IGP(C) Master's program, Doctoral program	Early November Mid-May	Late December Mid-July	April September
5	Domestic application	IGP(C) Master's program, Doctoral program	Early July	Early September	September

IGP (B) 2=International Graduate Program (B) Tokyo Tech-RIKEN International School
IGP (B) 3=International Graduate Program (B) application for students seeking scholarships offered by organizations and governments other than the Japanese government

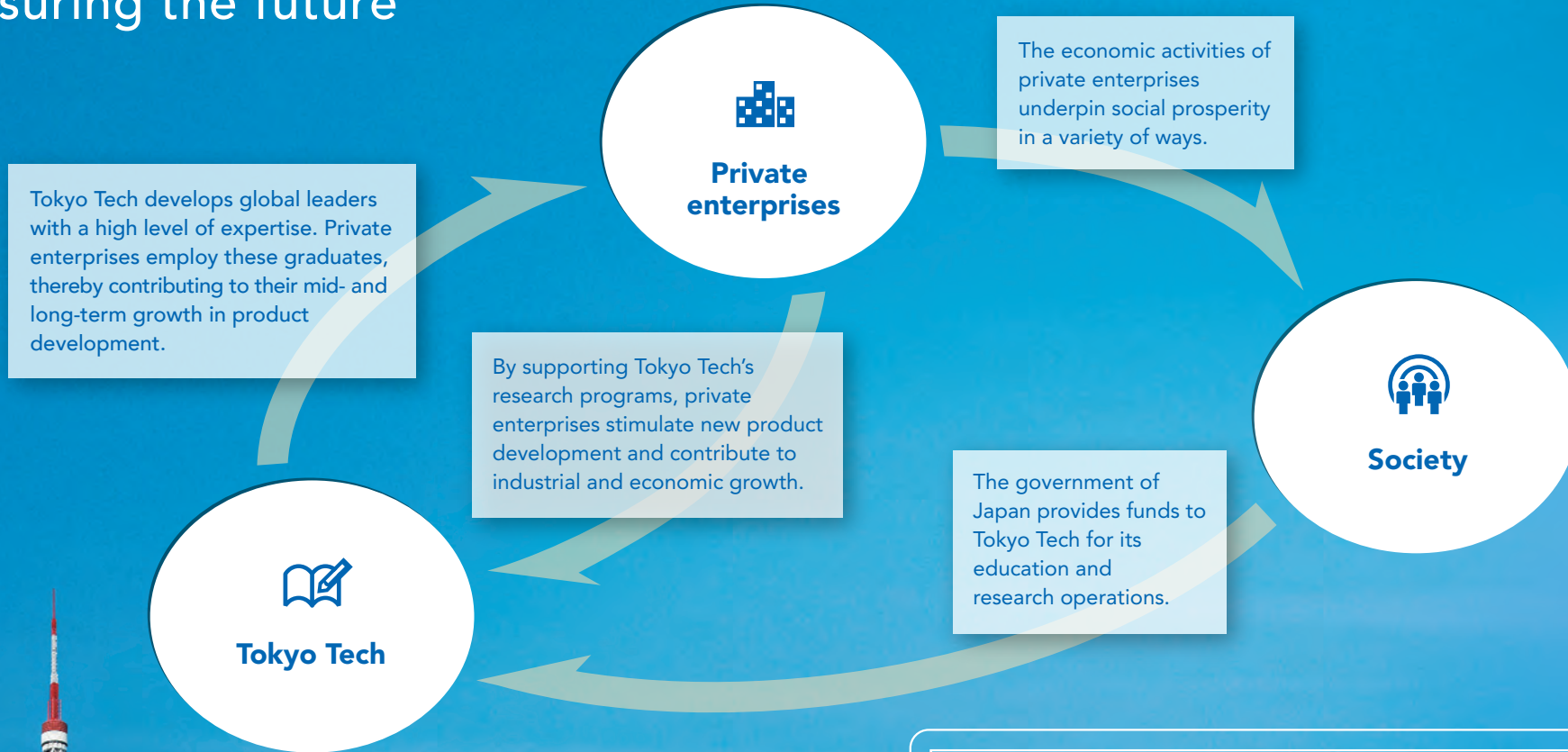


Campus rich in international flavor

Of the approximately **10,000** students at Tokyo Tech, **12%** are **international students** — one of the highest percentages in Japan.



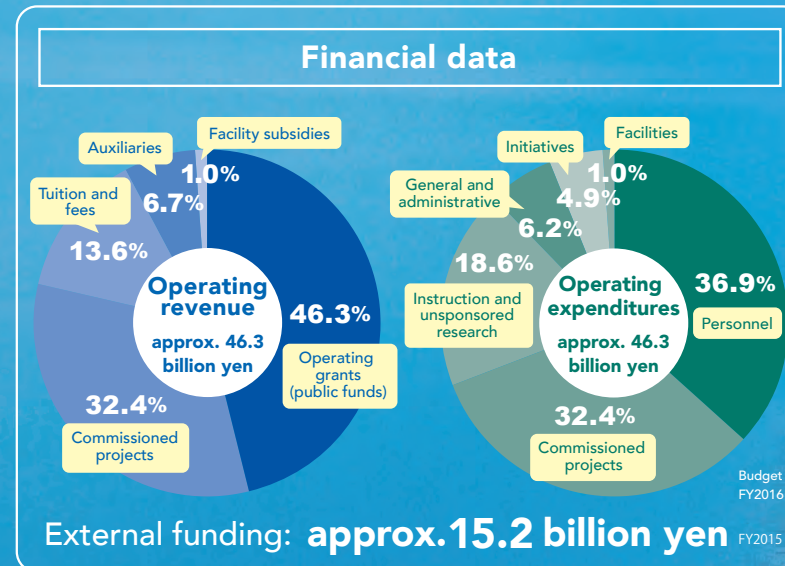
Ensuring the future



Spotlight

Tokyo SkyTree and Tokyo Tower: Structural design of two major landmarks in Tokyo

Two Tokyo Tech graduates, separated by a generation yet working for the same company, were involved in the structural design of two of Tokyo's world-renowned towers, the Tokyo SkyTree and the Tokyo Tower. These landmarks bear witness to the living spirit of Tokyo Tech's technical innovation.



Tokyo Tower



Tokyo SkyTree

Life at Tokyo Tech

Sports and social clubs catering to all tastes

Student clubs

Meister

Building human-powered aircraft and electric vehicles

Meister is a club where members build human-powered aircraft and electric racing vehicles known as Econo-moves. The club has won the human-powered aircraft distance rally category in the Japan International Birdman Rally five times.



Chor Kleines

Mixed chorus for universities in the Kanto region

Chor Kleines is a choir with more than 150 students from multiple universities. It has placed first in the Japan Choral Association's National Choral Competition for over 15 years.



Science Techno

Conveying the fun of science

Science Techno conducts workshops at elementary schools with the aim of connecting children with science. Providing the "I got it!" experience and putting smiles on children's faces is a rewarding feeling.



Tokyo Tech Festival

The Tokyo Tech Festival takes place at Ookayama Campus each October. Various exhibits and presentations are held in lecture rooms, and many food tents are set up outside. Lab walk-ins are available for visitors to experience Tokyo Tech's state-of-the-art science and technology.



Advantages in the job market

Employment statistics

Tokyo Tech graduates are highly sought after by employers. The Institute is proud of its stellar track record of producing ethical graduates with a high degree of expertise.

2nd in Japan employability survey

Tokyo Tech was ranked 26th in the world and 2nd in Japan for employable graduates according to the Global Employability University Survey and Ranking 2015, jointly produced by French human resources consulting firm Emerging Associates and German polling institute Trendence.

Top employers of Tokyo Tech graduates

Rank	Company	Rank	Company
1	Hitachi, Ltd.	6	IHI Corporation
2	Mitsubishi Electric Corporation	6	Toshiba Corporation
3	Toyota Motor Corporation	6	Nomura Research Institute, Ltd.
4	Canon Inc.	9	Nippon Steel & Sumitomo Metal Corporation
4	Panasonic Corporation	9	Mitsubishi Heavy Industries, Ltd.


Bachelor's and master's degree programs combined



Tech-chan, official mascot of the Tokyo Tech Festival © Hida / Tokyo Tech Festival executive committee

Learning by doing



Lifelong learners 

Tokyo Tech Professional Academy

The Tokyo Tech Professional Academy offers graduate-level classes for professionals active in their respective areas. Classes are conveniently held on weeknights and Saturdays at Tamachi Campus, located in the center of Tokyo. Suggestions and requests from the business community are incorporated into the curriculum.



Online courses 

TokyoTechX


Tokyo Tech offers TokyoTechX MOOCs, online courses delivered worldwide through the edX platform. Student teaching assistants (TAs) take active roles in the creation of the virtual classroom.

Exciting exhibits and events 

Museum and Archives

Tokyo Tech's Museum and Archives are located in the Centennial Hall. They showcase the history and range of educational and research outcomes of the Institute, and periodically host special exhibitions and events. There is also an exhibition space at Suzukakedai Campus.



Excited about learning 

Science classes in the summer break

The Science Club in the Summer Break is a popular outreach program for children that strives to kindle their interest in science. Tokyo Tech offers fun and inspiring events such as Play with the Earth which provides hands-on experience with minerals.



A slice of cheesecake 

Library

The Ookayama Library, a modern slice of architecture, opened in 2011 and won the Good Design Award in the same year. The Ookayama and Suzukakedai Libraries contain a combined total of more than 810,000 books and are designated by the government as a National Center for Overseas Periodicals.

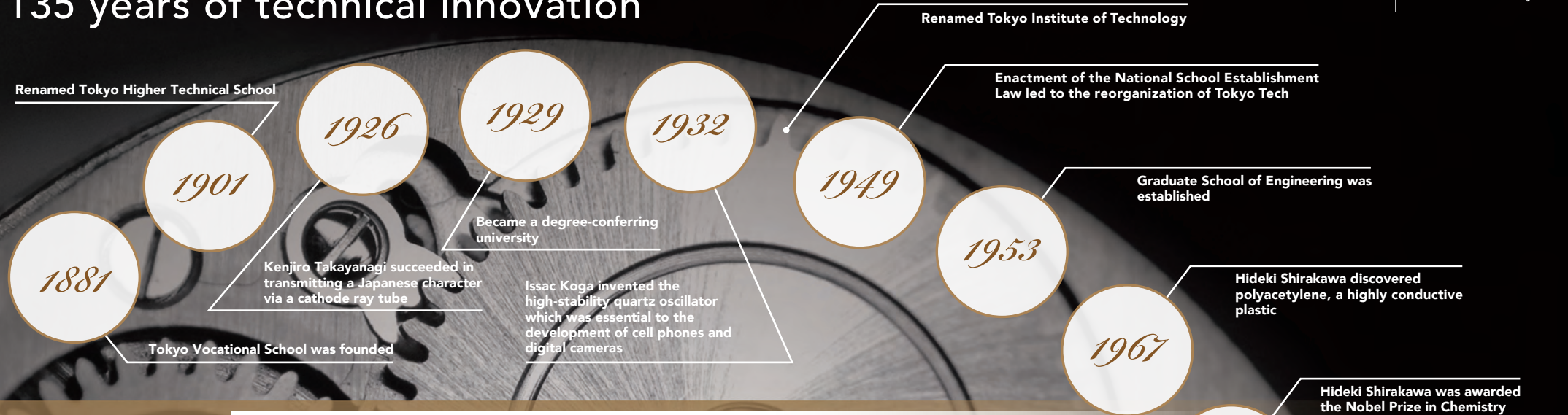


Technical innovation starts here 

Collaboration Center for Design and Manufacturing (CODAMA)

Tokyo Tech has CODAMA makerspaces at Ookayama and Suzukakedai Campuses, offering students a place to imagine, experiment, innovate, and create. The center holds a special event at Tokyo Tech Festival which is open to the people of the community.

135 years of technical innovation



Roots

Tokyo Vocational School

Tokyo Tech was founded in 1881 as the Tokyo Vocational School. Under the Meiji government, it sought to produce engineers with a high level of expertise in order to revitalize Japan through the promotion of technology.



Tokyo Vocational School Buildings, circa 1900

Spotlight

Kenjiro Takayanagi

Tokyo Tech graduate Takayanagi transmitted a Japanese character via a cathode ray tube in 1926, creating the model for future televisions. The electrical transmission and image-receiving technology he invented is still used today in digital high-definition LCD TVs and TV telephones.



Spotlight

Issac Koga (Issaku Koga)

Plates of quartz crystals oscillate at an extremely precise frequency when alternating voltage is applied to them. Koga developed specific surface angles at which to cut quartz crystal plates, thereby improving their thermal properties. His inventions remain the core technology of quartz clocks and modern wireless communication systems.



Gottfried Wagener

Gottfried Wagener was a German-born scientist who came to Japan in 1868, the first year of the Meiji period. As a technological advisor, he played an important role in the foundation of the Tokyo Vocational School. Wagener strongly urged the Japanese government to establish a school to produce leaders in science and technology. After the foundation of the school, Wagener taught ceramics there.



Gottfried Wagener, father of modern Japanese ceramics



Seiichi Tejima, pioneer advocate of technical education in Japan

Seiichi Tejima

Seiichi Tejima, another influential figure in the founding of the Tokyo Vocational School, promoted modern technical and industrial education in Japan. Based on his experiences abroad, he tenaciously persuaded top government officials of the value of establishing a technical school.

2004
Reestablished as an independent administrative institution under the name National University Corporation Tokyo Institute of Technology

2006
TSUBAME 1.0

2006
Joined undergraduate and graduate schools and established 6 Schools

2016
Going forward

Schools

School of Science

Mathematics / Physics / Chemistry / Earth and Planetary Sciences

- Volcanic Fluid Research Center
- Center for Research in Financial Sciences

School of Engineering

Mechanical Engineering / Systems and Control Engineering / Electrical and Electronic Engineering / Information and Communications Engineering / Industrial Engineering and Economics

School of Materials and Chemical Technology

Materials Science and Engineering / Chemical Science and Engineering

School of Computing

Mathematical and Computing Science / Computer Science

School of Life Science and Technology

Life Science and Technology

School of Environment and Society

Architecture and Building Engineering / Civil and Environmental Engineering / Transdisciplinary Science and Engineering / Social and Human Sciences / Innovation Science / Technology and Innovation Management (professional master's degree program)

- Research Center for Educational Facilities

Institute for Liberal Arts (ILA)

Institute of Innovative Research (IIR)

Laboratory for Future Interdisciplinary Research of Science and Technology (FIRST)
 Laboratory for Materials and Structures (MSL)
 Laboratory for Chemistry and Life Science (CLS)
 Laboratory for Advanced Nuclear Energy (LANE)
 International Research Center of Advanced Energy Systems for Sustainability (AES)
 Advanced Research Center for Social Information Science and Technology (ASIST)
 Research Units focused on emerging cutting-edge research

Strategic Research Hubs

- Earth-Life Science Institute (ELSI)
- Materials Research Center for Element Strategy (MCES)
- Collaborative Research Center for Happiness Co-Creation Society through Intelligent Communications (HAPIC)

Tokyo Tech High School of Science and Technology

Library

Institute-Wide Education Centers

- Innovator and Inventor Development Platform
- Academy for Global Leadership
- Academy for Co-creative Education of Environment and Energy Science
- Education Academy of Computational Life Sciences
- Academy for Global Nuclear Safety and Security Agent
- Center for International Education
- Tokyo Tech Professional Academy

Institute-Wide Support Centers

- Health Support Center
- Student Support Center
- Collaboration Center for Design and Manufacturing (CODAMA)
- Global Scientific Information and Computing Center (GSIC)
- Center for Biological Resources and Informatics
- Radiation Research and Management Center
- Research Support Center for Low-Temperature Science
- Museum and Archives

Members

Students

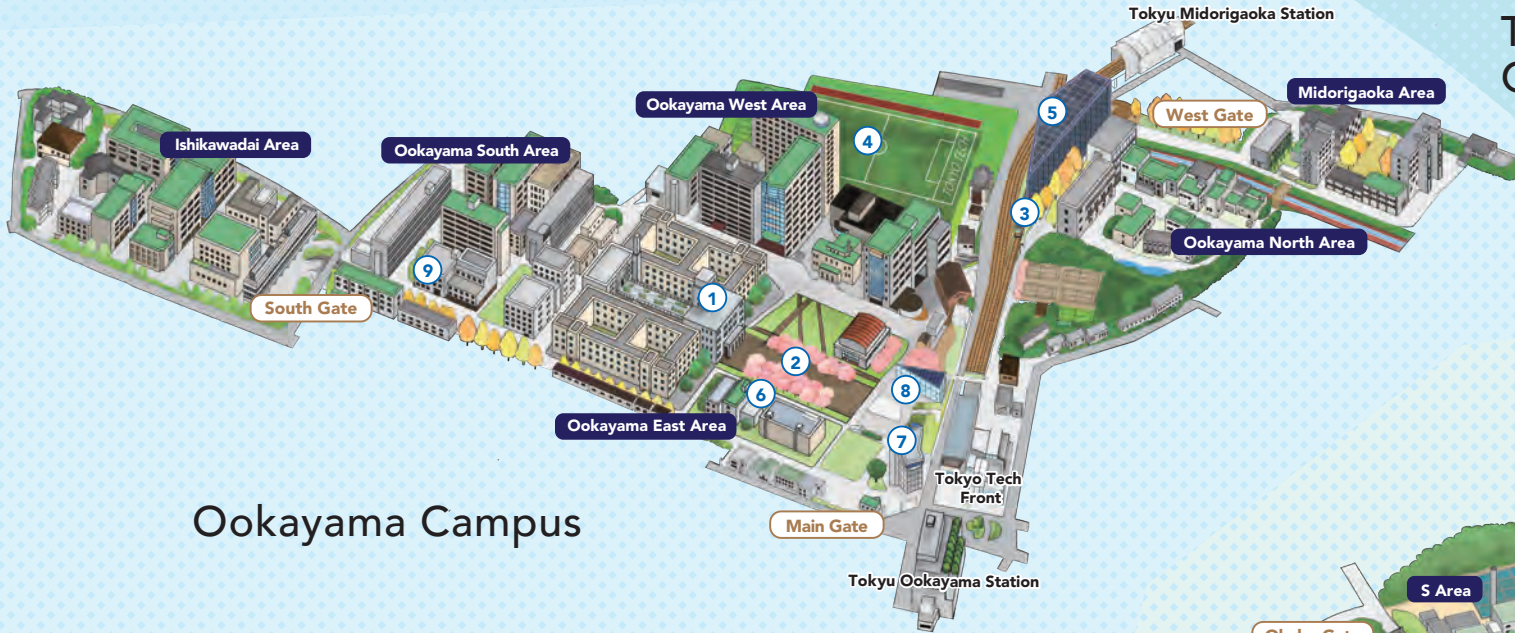
approx. **10,000**

Faculty members

approx. **1,200**

Administrative & technical staff

approx. **600**



Ookayama Campus



① Main Building

A symbol of Tokyo Tech since 1934, the Main Building is located in the center of Ookayama Campus.



② Promenade of cherry trees

Impressive cherry blossom trees line the deck in front of the Main Building. They usually reach their peak bloom just in time to welcome students at the start of spring.



③ Ginkgo trees in the North Area

Ginkgo trees form a welcoming green canopy in the summer and a vibrant golden one in the fall.



④ Multipurpose field

Students enthusiastically take advantage of the artificial turf field for a variety of club and athletic activities.



⑤ Environmental Energy Innovation (EEI) building

The building has a centralized smart-grid management system called Ene-Swallow, and is nearly energy self-sufficient.

⑥ Statue of Seiichi Tejima →P.16

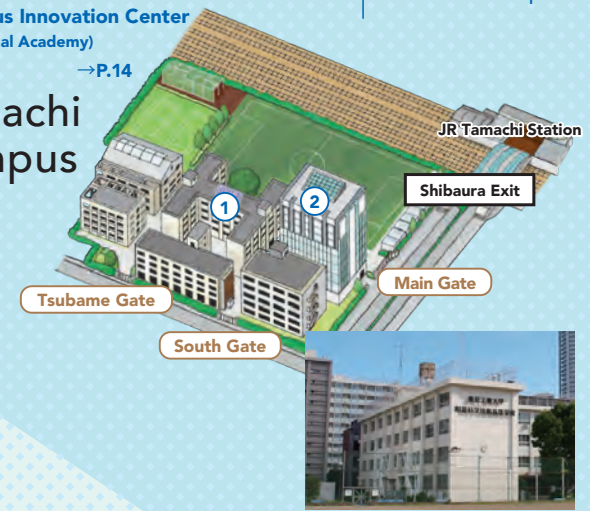
⑦ Museum and Archives →P.14

⑧ Library →P.14

⑨ Collaboration Center for Design and Manufacturing Environmental (CODAMA) →P.15

② Tokyo Tech Campus Innovation Center (Tokyo Tech Professional Academy) →P.14

Tamachi Campus



① Tokyo Tech High School of Science and Technology

Tokyo Tech High School of Science and Technology, endorsed by the Japanese government as a Super Science High School (SSH) and a Super Global High School (SGH), offers an advanced curriculum in science and technology while promoting global science and technical leadership.



Suzukakedai Campus



① Suzukake Hall

Boasting a lounge and cafeterias, the Suzukake Hall is an oasis on Suzukakedai Campus. It also hosts international conferences.

② Suzukakedai Library →P.14

③ Museum's Suzukakedai Exhibition Space →P.14