For more information, visit
https://www.titech.ac.jp/english

Tokyo Institute of Technology
Public Relations Section

2-12-1 Ookayama, Meguro-ku, Tokyo 152-8550 JAPAN
TEL: +81-3-5734-2975
FAX: +81-3-5734-3661

Cover photo: J2 and J3 Buildings, Suzukakedai Campus

Tokyo Tech

OVERVIEW

Tokyo Institute of Technology

Table of Contents

Library

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

A better future through autonomy and collaboration

Founded 137 years ago, Tokyo Tech continues its long tradition of creating significant impact through science and technology while embracing an increasingly global presence.

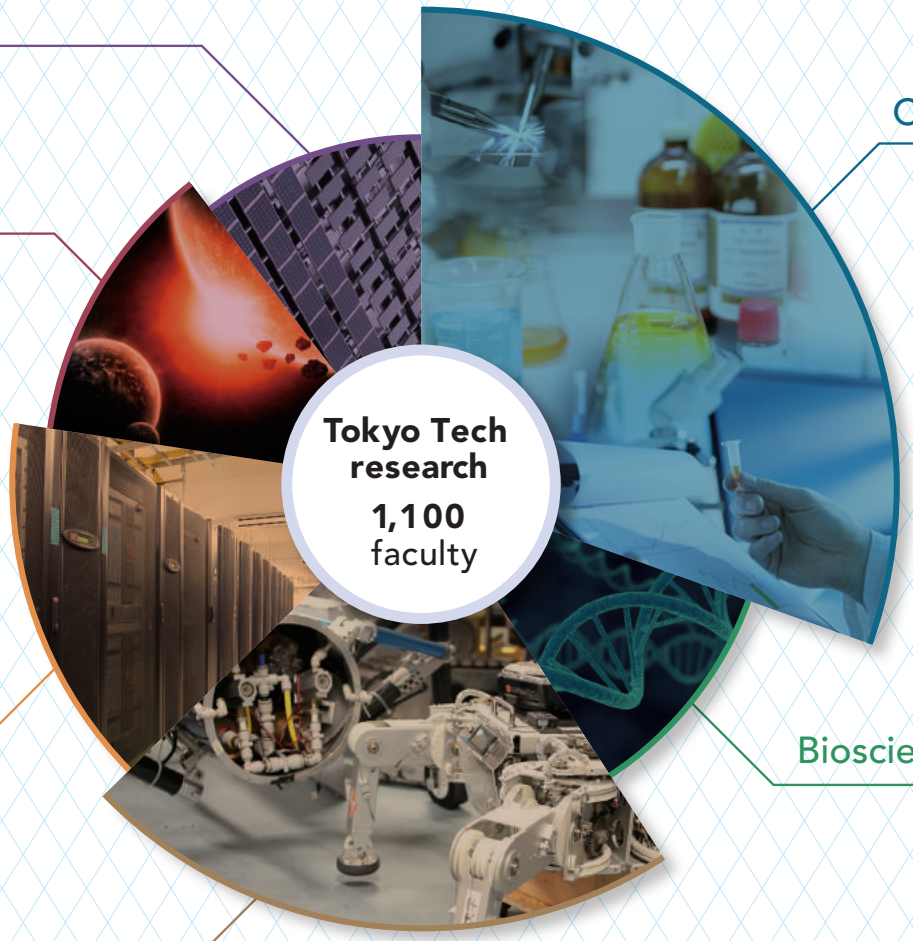
To spur this momentum, the Institute launched six new Schools and various other sweeping reforms in April 2016, enhancements that have since been dubbed Tokyo Tech's second founding.

By seeking out opportunities for borderless collaboration while respecting its culture of autonomy, Team Tokyo Tech strives to create a better future.

Kazuya Masu
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 Institutes 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

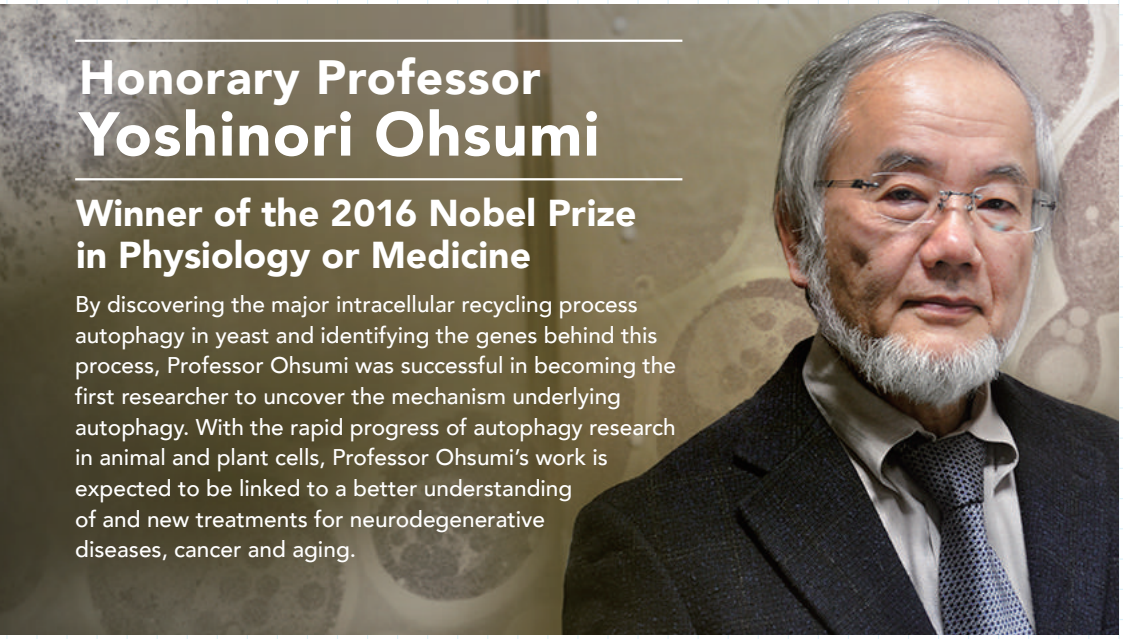
Electronics and Information Technology

Mechanics and Architecture

Chemistry and Materials

Bioscience and Biotechnology

Pushing the frontiers



Honorary Professor Yoshinori Ohsumi

Winner of the 2016 Nobel Prize in Physiology or Medicine

By discovering the major intracellular recycling process autophagy in yeast and identifying the genes behind this process, Professor Ohsumi was successful in becoming the first researcher to uncover the mechanism underlying autophagy. With the rapid progress of autophagy research in animal and plant cells, Professor Ohsumi's work is expected to be linked to a better understanding of and new treatments for neurodegenerative diseases, cancer and aging.

WPI

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.

Element strategy

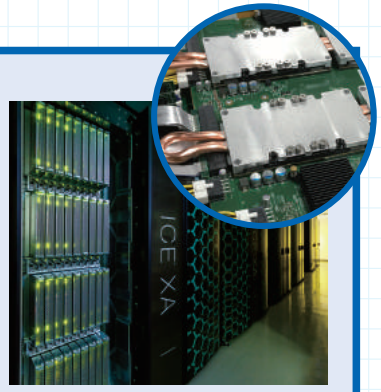
Materials Research Center for Element Strategy (MCES)

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.

TSUBAME supercomputer

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

Our latest supercomputer, TSUBAME3.0, was ranked first on the list of the world's most energy-efficient supercomputers, Green500 (June 2017).



COI STREAM

Research Institute for the Earth Inclusive Sensing Empathizing with Silent Voices (EISESiV)

A society and earth where people and nature harmoniously coexist
– empathizing with "Silent Voices"

These R&D activities – run under the Center of Innovation Science and Technology Based Radical Innovation and Entrepreneurship Program (COI STREAM) – are supported by the Ministry of Education, Culture, Sports and Technology. Listening to the "silent voices" of nature (i.e., inclusive sensing), the COI aims to solve human, social and environmental issues via human – and environment – friendly ways in collaboration with companies and local municipalities.

Industry relations

Create new industries and drive innovation

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

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.

GSEP application schedule

Application period	Notification of results	Admission
August to early September	Late November	April

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.

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-April	Mid-June	September
3		IGP(B)3	Doctoral program	Mid-January	Mid-March	September
4	Overseas / domestic application	IGP(C)	Master's program, Doctoral program	Early November	Late December	April
				Mid-April	Late June	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 **11,000** students at Tokyo Tech, **16%** are **international students** — one of the highest percentages in Japan.

Ensuring the future

Private enterprises

The economic activities of private enterprises underpin social prosperity in a variety of ways.

Society

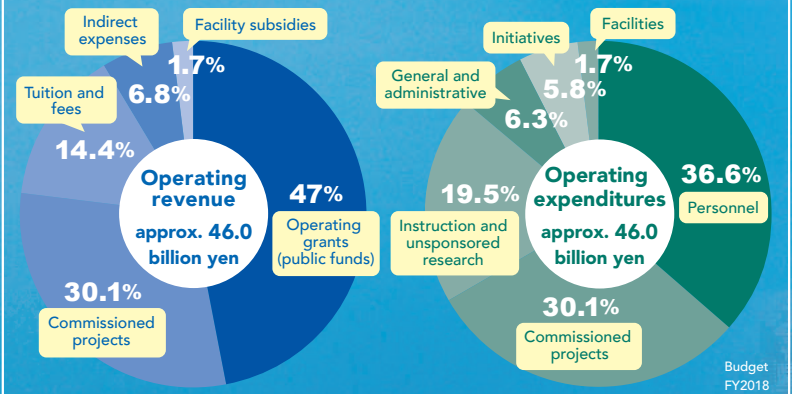
The government of Japan provides funds to Tokyo Tech for its education and research operations.

Tokyo Tech

Tokyo Tech develops global leaders with a high level of expertise. Private enterprises employ these graduates, thereby contributing to their mid- and long-term growth in product development.

By supporting Tokyo Tech's research programs, private enterprises stimulate new product development and contribute to industrial and economic growth.

Financial data



External funding: **approx.18.4 billion yen** FY2017

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

Tokyo Tech Society for the Study of Robotics
Building Robots in Teams

The Tokyo Tech Society for the Study of Robotics is an extracurricular club for students interested in building machines, creating electronics, and programming. The club's team, Maquinista, took first prize for the first time at NHK Gakusei Robocon 2017. At the 2017 ABU Asia-Pacific Robot Contest, Maquinista made it to the quarterfinals representing Japan, and won a "fighting spirit" award after having made it into the top four.

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.

ScienceTechno
Conveying the fun of science

ScienceTechno conducts hands-on science workshops and demonstrations at elementary schools and other places where children can enjoy learning new things about science in fun and exciting ways. Their faces lighting up with smiles throughout this experience is very rewarding for everyone.

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.

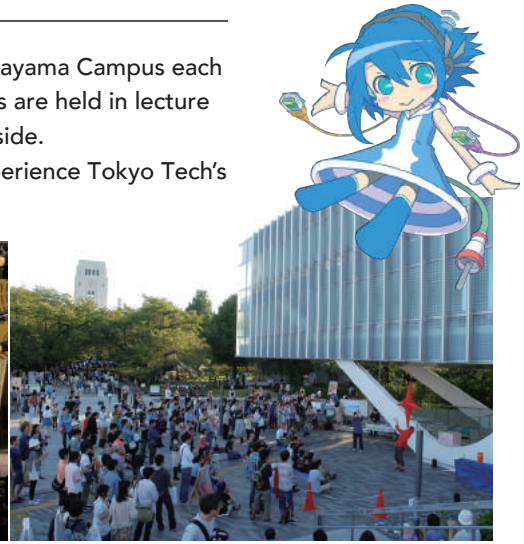
Top employers of Tokyo Tech graduates

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.

Bacherlor's and master's degree programs combined

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.



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

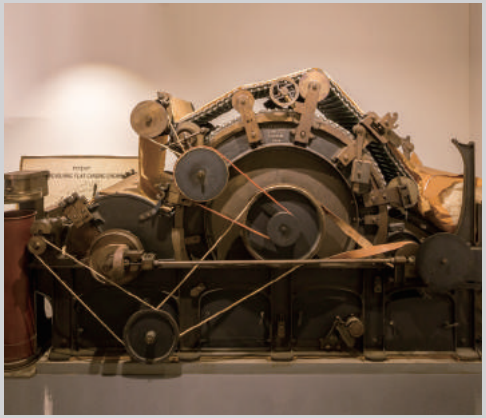
TokyoTechX

Tokyo Tech offers online courses (MOOCs) delivered worldwide on the edX platform since 2015. Nearly 50,000 learners from 190 countries and regions from around the world have studied our courses on Earth Science, Japanese Architecture, Electrical Engineering, Engineering Ethics, Autophagy (Molecular biology) and Monotsukuri (Crafting things).

Exciting exhibits and events

Museum and Archives

Tokyo Tech Museum and Archives is 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 is notable for its modern, "Good Design Award"-winning look. Together with the Suzukakedai library, the two contain a total of 800,000 volumes, with a focus on science and engineering fields, in both Japanese and foreign languages. Both libraries are also open to general researchers who need to use our materials for their research work.

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.

137 years of technical innovation

1881 — Founded as Tokyo Vocational School

1901 — Renamed Tokyo Higher Technical School

1926 — Kenjiro Takayanagi succeeds in transmitting Japanese character via cathode ray tube

1929 — Becomes degree-conferring university

1932 — Issac Koga invents high-stability quartz oscillator, a key to the development of cell phones and digital cameras

1949 — Renamed Tokyo Institute of Technology; Enactment of National School Establishment Law leads to reorganization of Tokyo Tech

1953 — Graduate School of Engineering established

1967 — Hideki Shirakawa discovers polyacetylene, a highly conductive plastic

2000 — Hideki Shirakawa awarded Nobel Prize in Chemistry

2004 — Reestablished as National University Corporation Tokyo Institute of Technology, an independent administrative institution

2006 — Supercomputer TSUBAME 1.0

2016 — Undergraduate, graduate schools joined to establish 6 new Schools; Yoshinori Ohsumi awarded Nobel Prize in Physiology or Medicine

2018 — Going forward

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

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.

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.

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, *father of modern Japanese ceramics*

Seiichi Tejima, *pioneer advocate of technical education in Japan*

Schools and institutes

Schools

School of Science
Mathematics / Physics / Chemistry / Earth and Planetary Sciences

- Volcanic Fluid Research Center
- Center for Research in Financial Sciences
- Exoplanet Observation Research Center
- Advanced Research Center for Quantum Physics and Nanoscience

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

- Cybersecurity Research Center

School of Life Science and Techology
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)
Cell Biology Center
Research Units focused on emerging cutting-edge research
Organization for Fundamental Research

Strategic Research Hubs
- Earth-Life Science Institute (ELSI)
- Materials Research Center for Element Strategy (MCES)
- Research Institute for the Earth Inclusive Sensing

Tokyo Tech High School of Science and Technology

Library

Institute-Wide Education Centers
- Innovator and Inventor Development Platform
- Academy for Global Leadership
- Tokyo Tech Academy for Leadership (ToTAL)
- Center for International Education
- Tokyo Tech Professional Academy

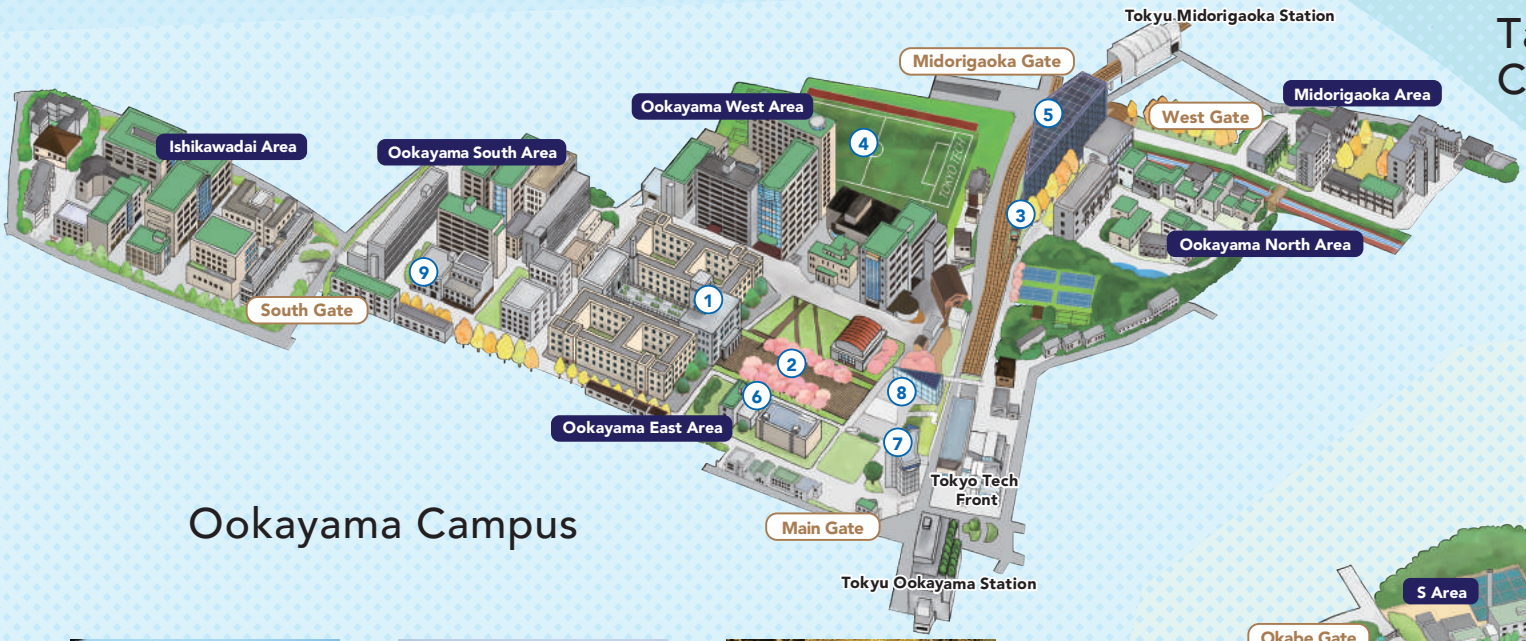
Institute-Wide Support Centers
- Health Support Center
- Student Support Center
- Collaboration Center for Design and Manufacturing (CODAMA)
- Center for Innovative Teaching and Learning (CITL)
- Global Scientific Information and Computing Center (GSIC)
- Center for Biological Resources and Informatics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

Members

Students	Faculty members	Administrative & technical staff
approx. 11,000	approx. 1,100	approx. 600

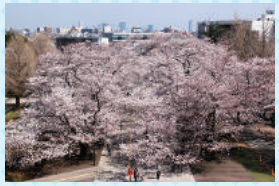
Campuses

Ookayama Campus



①Main Building

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



②Promenade 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.

③Ginkgo trees in the North Area

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

④Multipurpose field

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

⑤North building 3
Environment Energy Innovation(EEI)Building

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

⑥Statue of Seiichi Tejima →P.16

⑦Museum and Archives →P.14

⑧Library →P.14

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

Tamachi Campus

①Tokyo 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.

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

Suzukakedai Campus

①Suzukake Hall

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

②Suzukakedai Library →P.14

③Museum's Suzukakedai Exhibition Space →P.14