



国立大学法人
豊橋技術科学大学
TOYOHASHI
UNIVERSITY OF TECHNOLOGY

1-1 Hibarigaoka, Tempaku, Toyohashi, Aichi, 441-8580, JAPAN
<https://www.tut.ac.jp/english/>

Master technology, Create technology

Basic philosophy

The mission of Toyohashi University of Technology (TUT) is to conduct research and education in technological science, developing new technologies through scientific inquiry.

Based on this mission, TUT targets new graduates from technical colleges and high schools for enrollment. TUT carries out research in technological science with an emphasis on postgraduate study, fostering the new generation of engineers who will find practical solutions to the challenges of tomorrow.

While focusing on science, TUT nevertheless emphasizes the importance of social context. Accordingly TUT strives to promote social diversity and works to enhance collaboration with the local community. Through these efforts, TUT strives to be a top-class engineering university that is open to the world.



University seal

As part of the 20th anniversary commemoration, a public contest was held to select the design for a new university seal. Using our University initials (T.U.T.) as a motif, this seal energetically expresses the vitality and freshness of our students' efforts in research and practical innovation in the form of cresting waves.



University logo

This logo was designed in such a way as to capture the philosophy and goals of our university. It is used in a variety of formats as a core element of our visual communications.

The concept of the logo's design is "Striving together to provide an education that supports global industry". The shape is comprised of two interlocking "Ts" in red and black, which stand for Toyohashi and Technology. The red expresses "foundation" and "humanity" and the black represents "expertise" and "technical capability". The overlapping design of the Ts is intended to express the way in which the nurturing of excellent human resources will support world industry. The Logo also conveys sincerity toward education as well as dependability.

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Aiming to be a world-class university focused on technology

- Creating a vibrant university that contributes to society -



President
Terashima Kazuhiko

Profile

1982 Completed PhD at Kyoto University Graduate School (Doctor of Engineering)
 April 1994 Professor, Toyohashi University of Technology
 April 2012 Vice President, Toyohashi University of Technology (until March 2018)
 April 2018 Executive Trustee/Vice President, Toyohashi University of Technology (until March 2020)
 April 2020 President, Toyohashi University of Technology

Toyohashi University of Technology (TUT) seeks to contribute to society through the facilitation of top-level educational programs and research. TUT encourages students to nurture a spirit respecting the freedom of thought and expression and always proactively working to improve, while at the same time it works to develop individuals able to look at things from both the long-term and short-term perspectives. It wishes to develop students that view issues comprehensively from diverse perspectives instead of just from one perspective, in a core-searching way without concern for unimportant details — individuals who have a strong future-oriented mindset, and who contribute to society by expanding the possibilities of technology and science.

TUT was established with the mission of unraveling technology from scientific perspectives and facilitating education and research in technological science, a study with a focus on the development of more advanced technologies and the systematic organization of technologies. Going forward, while respecting social diversity and strengthening partnerships with local communities and industries, TUT will seek to admit students who are skilled creators and further strengthen its educational programs on cross-sectional and advanced CPS (cyber physical systems) technologies such as sensing, IoT/AI and robotics, as well as the areas it has conventionally specialized in. Through these efforts, it aims to become one of the top-rated universities focused on technology in the world in practical research and the social implementation of new technologies.

To build on the activities TUT has engaged in since its establishment, it formulated the TUT Plan 2021 focused on five challenges. In addition, TUT, as a partner in the Top Global University Project, will facilitate digital transformation and move forward with globalization efforts going forward such as the active admission of foreign exchange students and encouraging students to study overseas while also facilitating an optimized hybrid implementation of online and face-to-face educational programs even amid the new normal created by the COVID-19 pandemic. It will also work actively on the achievement of the Sustainable Development Goals (SDGs) by addressing common issues shared by people globally with an eye toward the creation of a secure and safe society.

Providing liberal arts education, including the study of sociology and the humanities, in addition to science technology and engineering knowledge is crucial in the development of innovative human resources that open the way to the future. TUT provides this education through its undergraduate departments and graduate school. Liberal arts, which are considered the starting point of all

studies regardless of whether they are in humanities or science, help students develop creative ideas in the application of basic and applied technological science. Further, TUT actively promotes and supports partnerships with the National Institute of Technology (KOSEN), international collaboration, industry-academia collaboration, and extracurricular activities, to focus efforts on the development of tough minded, creative people.

No university can operate without students or faculty. TUT has been doing everything it can to maintain and improve its environment to ensure that its students and faculty vibrantly engage in activities every day to achieve their dreams and desires, and the goals of their studies and activities.

TUT will facilitate local needs-oriented collaboration and contribution to local communities while at the same time innovating through partnerships with many parties globally. By doing so, it seeks to create a university that is capable of changing the world through technological science and contributing to society. Your continued support and guidance is very much appreciated.

Five challenges

1. Creating a multicultural, global campus under the COVID-19 pandemic
2. Fostering future innovators through science & technology education
3. Enhancing research capabilities by establishing flagship research and core competencies
4. Emphasizing technological science that contributes to building a sustainable society
5. Developing young human resources and female faculty, and enhancing the vitality of education & research with an attractive HR system

University history

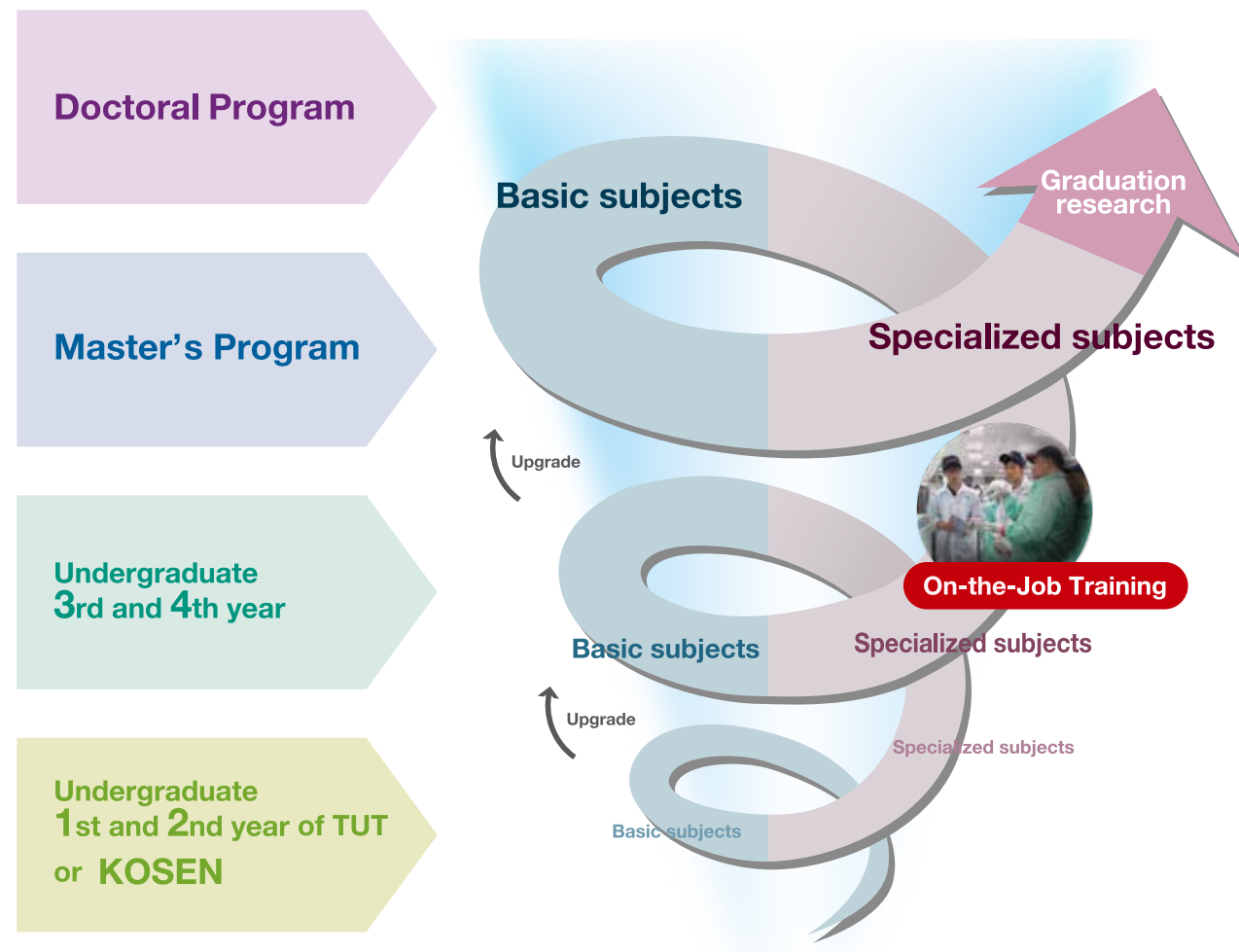
- 1976 Opening of Toyohashi University of Technology
- Inauguration of the first president Sakaki Yoneichiro
- 1977 Commencement of Undergraduate Courses: Energy Engineering, Electrical and Electronic Engineering, Information and Computer Sciences, Materials Science, Architecture and Civil Engineering
- 1978 Inaugural entrance ceremony
- 1980 Commencement of Master's Course in Graduate School of Engineering
- 1984 Inauguration of the second president Honda Namio
- 1986 Commencement of Doctoral Course in Materials System Engineering and Systems and Information Engineering within the Graduate School of Engineering
- 1987 Commencement of Doctoral Course in Integrated Energy Engineering within the Graduate School of Engineering
- 1988 Establishment of Faculty of Knowledge-based Information Engineering at the undergraduate level
- 1990 Inauguration of the third president Sasaki Shinichi
- 1993 Establishment of Faculty of Ecological Engineering
- 1995 Reorganization of Doctoral Courses in Graduate School of Engineering: Establishment of Mechanical and Structural System Engineering, Functional Materials Engineering, Electronic and Information Engineering, Environmental and Life Engineering
- 1996 Inauguration of the fourth president Goto Keishi
- 2000 Commencement of Master's Courses given in English
- 2002 Inauguration of the fifth president Nishinaga Tatau
- 2004 Toyohashi University of Technology established as a "National University Corporation"
- 2008 Inauguration of the sixth president Sakaki Yoshiyuki
- 2010 Reorganized Undergraduate and Master's Courses: Mechanical Engineering, Electric and Electrical Information Engineering, Computer Science and Engineering, Environmental and Life Sciences, Architecture and Civil Engineering
- 2012 Reorganized Doctoral Courses
- 2013 Establishment of TUT-USM Technology Collaboration Centre in Penang, Malaysia
- 2014 Inauguration of the seventh president Onishi Takashi
- 2017 Commencement of Global Technology Architects Course
- 2020 Inauguration of the eighth president Terashima Kazuhiko



Education

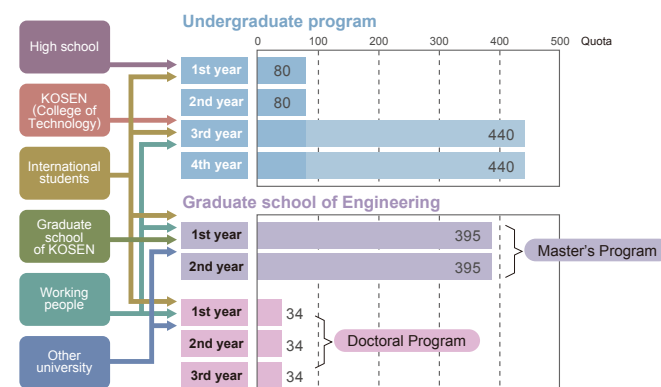
“Spiral-up” curriculum

We run a “Spiral-up” curriculum education system. In the system, students learn both basic science and specialized subjects in their first and second years of TUT or at KOSEN, moving up to a higher level of science from their third year and onward. This enables them to spiral up their knowledge and experience by taking on the challenge of more advanced skills. This approach to education allows students to be exposed to technology from their first year. Just as sports education aims to create top athletes by repeatedly teaching a blend of theory and practice, the students (athletes) that have reached a certain level master the ability to put advanced theories into practice by confronting the next stage with a concrete sense of purpose.



An educational system focused on postgraduate education and research

TUT has established an integrated undergraduate and postgraduate education as reflected in the roughly equivalent balance of students in the undergraduate program and graduate school's master's program. Additionally, there are enough faculty to meet the needs of postgraduate education, so that the student-faculty ratio is considerably smaller when compared to other universities. This allows TUT to offer highly intensive and productive small-group instruction.



Collaboration with KOSEN

KOSEN (National College of Technology) is a unique Japanese higher educational institute which seeks to foster the engineers Japan needs to sustain high economic growth. Approximately 80% of our students graduated from KOSEN. We have developed a curriculum in collaboration with KOSEN which takes care of transfer students all the way from entrance at undergraduate level, through graduate school, to finding employment as elite engineers.

Credit accredited on-the-job training

All fourth year undergraduate students conduct a two-month mandatory on-the-job training in Japan or overseas. Being involved in private sector projects before going on to graduate school is extremely beneficial for establishing themselves for the future.

International Degree Programs are open to the world

TUT has been conducting Japanese-English bilingual lectures for many subjects since 2017. In addition, in the “International Degree Program” established within the graduate school, students can obtain master's degrees and Doctoral Degrees taught in English.

Collaboration with Local Community

TUT actively utilizes its education and research results to undertake social collaboration projects that contribute to the revitalization of the community and improvement of education and culture. We cooperate with local municipalities, companies, chambers of commerce and industry, and education and research institutions, and manage programs for elementary schools, junior high schools and high schools, and public lectures. In addition, we provide practical and professional educational programs for the community according to the needs of local people and companies, and train human resources who can contribute to the creation of innovation from the community.

Social collaboration projects

- Technology experience lectures for elementary and junior high school students
- Laboratory experience lectures for high school students
- Lectures for local people

Practical educational programs for the community (Regional human resource development project)

- Industrial technological chemistry field
- Community infrastructure field



Research

Formation of a Value Creating Engineering Research Core

TUT aims to establish a Research Core for Value Creating Engineering. Its purpose is to be a center for interdisciplinary integrated innovation that creates new values supported by science and technology beyond the existing boundaries of scientific fields, organizations, and culture. The primary purpose of the Research Core will be to create a university-wide organization capable of nurturing research.

The Research Core will leverage the impressive track record of the “Electronics-Inspired Interdisciplinary Research Institute,” which was established in 2010 as one of five research centers for heterogeneous field research and industry-academia collaborative activity.

Diverse talent, with a particular focus on young people, women, and international researchers will be invited to the Research Core, which will endeavor to recruit the brightest and best researchers, irrespective of nationality, age and gender.

TUT will encourage research institutes and companies from many fields and from home and abroad to participate.



Developing top researchers who lead Japan and the world

Comprehensive support by foreseeing the future of advanced research

TUT will provide an environment to generate excellent research results that will transform society by comprehensively managing researchers, equipment, funds, analysis, information dissemination and collaborations.

Research Institute for Science and Technology Innovation

The Research Institute for Science and Technology Innovation promotes innovative collaborative research projects in order to advance leading research.

Using matching funds with research institutions and companies, the institute will develop cutting-edge research in certain fields, enhance the social implementation of research results, and engender skills for making proposals to the wider society.

Advanced Research Collaborative Laboratory

Researchers from high-level research institutes, together with TUT faculty members, will collaborate to conduct longitudinal research in specific fields, aiming to advance and diversify TUT’s research.

- TUT-ISYS (Institute for System Dynamics, University of Stuttgart) International Cooperative Research Laboratory for Advanced Systems Engineering

Collaboration among Industry, Academia and Government

Since TUT’s opening, one of our missions has been to form the collaboration among industry base through joint research with companies.

The amount of joint research funds received by private companies per faculty member was the second highest in all universities in Japan in FY2019, and the number of patent applications and the income from patent grants are also high.

Based on these achievements, we are promoting cooperation with Japan and local industries, social implementation of research results, and social contribution to the region.

A center for research that goes beyond the boundaries of fields, organization, and culture

Academic departments



Mechanical Engineering

- Mechanical Systems Design
- Materials and Manufacturing
- System Control and Robotics
- Environment and Energy



Electrical and Electronic Information Engineering

- Electronic Materials
- Electrical Systems
- Integrated Electronics
- Information and Communication Systems



Computer Science and Engineering

- Computer and Mathematics Sciences
- Data Informatics
- Human and Brain Informatics
- Media Informatics and Robotics



Applied Chemistry and Life Science

- Bioscience and Biotechnology
- Applied Chemistry
- Advanced Environmental Technology
- Ecological Engineering



Architecture and Civil Engineering

- Architecture and Urban Design
- Urban and Regional Management

Research Institute for Technological Science and Innovation

< Laboratories >



EIRIS

Electronics-Inspired Interdisciplinary Research Institute



Venture Business Laboratory (LSI Factory)

< Research centers >



Center for Human-Robot Symbiosis Research



Research Center for Agrotechnology and Biotechnology

< Innovation Center >



Innovation Center for Venture Business



Research Center for Collaborative Area Risk Management



Research Center for Future Vehicle City

International Relations

As a university that is open to the world, we both encourage our Japanese students to study overseas, as well as enthusiastically accepting international students, international collaborative research, and human resources exchanges.

International collaborative education programs



Double degree programs
International Master's degree program
Germany University of Stuttgart
International Master's/Doctoral degree program
Finland University of Eastern Finland

Triple degree program
International Master's degree program
Finland University of Eastern Finland
Belgium KU Leuven
France University Jean Monnet Saint-Etienne

FD/SD programs
USA Queens College of the City University of New York

Overseas education base
Malaysia Penang, Malaysia

Overseas office
China Northeastern University, China

Twinning programs
International Master's program
Indonesia Bandung Institute of Technology
Indonesia Hasanuddin University
Vietnam Ho Chi Minh City University of Technology
China Northeastern University
Malaysia Universiti Sains Malaysia

Twinning programs
Undergraduate program
Vietnam Hanoi University of Technology
Vietnam University of Danang
Malaysia Malaysia Japan Higher Education Program
Malaysia Dist College
Mongolia Mongolian University of Science and Technology

► For a list of exchange agreement universities see page 21.

TUT has 89 partner universities in 30 countries. With some of the partners, TUT has established Double Degree Program and Twinning Programs. Students who have taken these programs can obtain degrees from our university.

In addition, we send students, faculty members, and staff abroad, and we implement programs to develop the abilities required of global human resources.

- Internships and summer schools at overseas companies for Japanese and international students
- Faculty Development (FD) Program aiming at improving professional education skills in English in collaboration with KOSEN
- Staff Development (SD) Program that develops proactive problems solving skills through experience of practical work overseas

Multicultural Global Campus

In addition to conducting Double Degree Programs and Twinning Programs, TUT accepts large numbers of research students and visiting students. Japanese students and International students live and study side by side on campus, such as in the on campus accommodation facility known as "TUT Global House". Through various programs, TUT aims to realize a global, multicultural campus where diverse nationalities, cultures, and values coexist.



Leading Education and Research Projects

Education

Top Global University Project FY2014-FY2023

Creative Campus for Nurturing "Global Technology Architects"

TUT accepts young people from all over the world and nurtures engineers capable of working actively in locations around the world. Our goal is to provide an engineering education that is not limited by language or culture, and improve the international competitiveness of our graduates.

In 2017, we began the Global Technology Architects Course (GAC) for Japanese and international students who are motivated to work globally. The unique on-campus, multicultural student accommodation, TUT Global House, opened in 2017 for GAC students, enabling them to simulate a global society. We also strive to improve the global capabilities of our students, our faculty and our staff.

"Nationwide Expansion of Mathematics/Data science/AI Education" cooperative university

Development of a comprehensive education environment that promotes the establishment of data science in manufacturing technology

TUT is one of 30 universities selected nationwide as a cooperative university under the "Strengthening Education in Mathematics and Data Science" initiative. As such, it is developing human resources who can turn data science into manufacturing technologies based on the university's founding spirit of "Developing Technology from Science."

The university is developing e-Learning materials to help establish data science technology in various engineering fields. The goal is to enable the use of Big Data in research not only by IT students but all students and researchers in their own fields.

These e-Learning materials combine self-study using electronic textbooks and practical exercises using data processing tools.

Toyohashi University of Technology is expanding the use of these teaching materials to other universities and companies, and make further improvements and extensions based on the knowledge obtained.

Research

The Program for Promoting the Enhancement of Research Universities FY2013-FY2022

Striving for further development as a research university that produces valuable and outstanding world-class research

TUT aims to create an innovative and forward-thinking foundation from which it can promote the implementation of innovative research and the impact of such research on society.

The university aims to do this by evolving from the traditional "problem-solving model of engineering" to a "value-producing model of engineering".

This view is based on a firm belief that engineers can create new values by combining disparate fields.

The university's Research Administration Center (RAC), which was created as a result of this project, plays a central role in maintaining a support system and providing an environment that strives towards this goal.

Through the breaking down of the barriers between research fields and organizations, deepening connections with international and domestic corporations and research institutions, inviting international top-class people from a variety of backgrounds will become possible.

Moreover we will make an effort to institute a new system for managing human resources, coordinating multinational research, approaching intellectual property strategically, hosting international symposiums, and maintaining regular communication with TUT's partners abroad.

University Management

National University Management Reform Promotion Project FY2019-FY2021

Building a regional industrial -academic -governmental platform based on collaboration Between both of Toyohashi University of Technology (TUT), Nagaoka University of Technology (NUT) and KOSEN, and strengthening an independent financial base and management through nationwide deployment

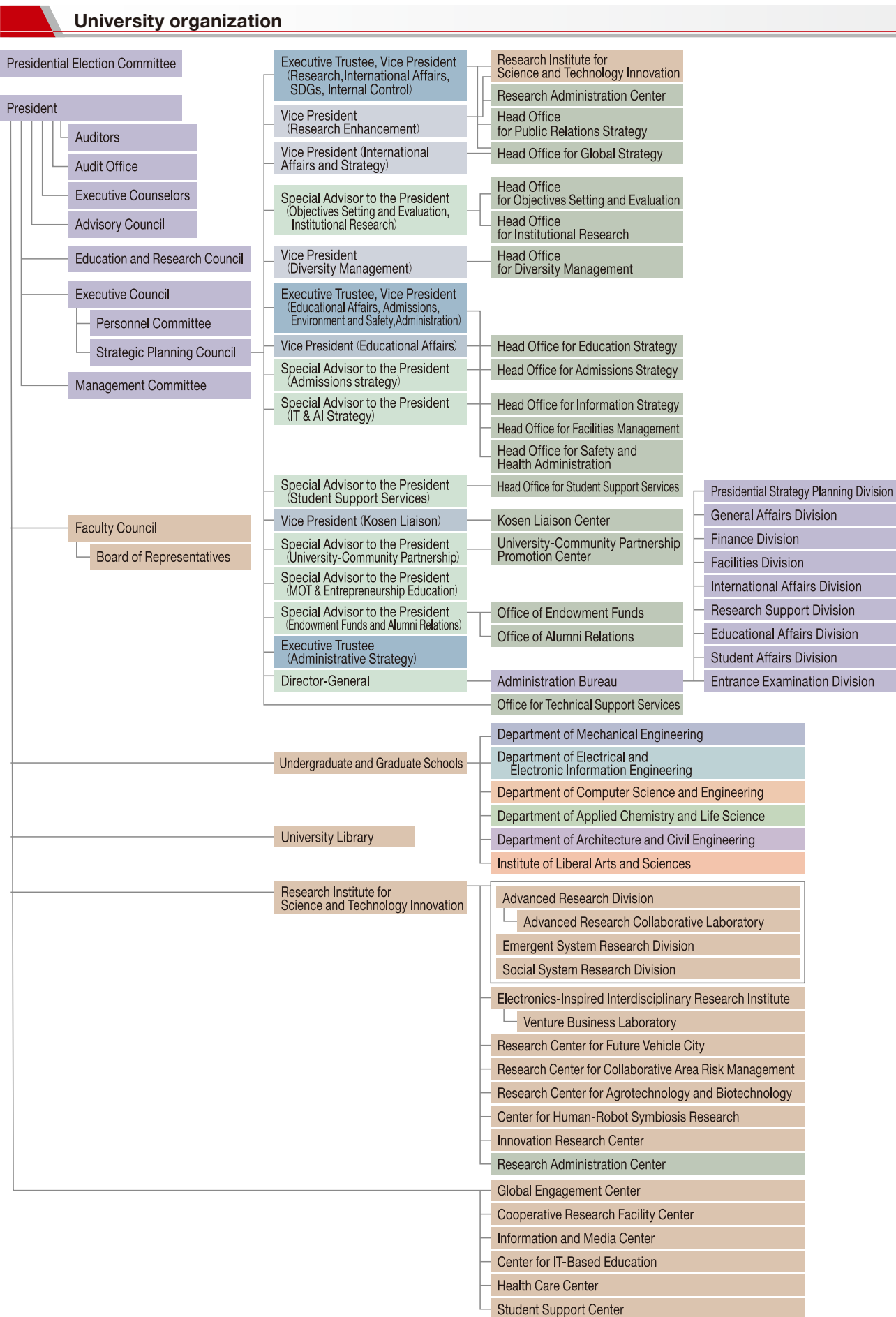
TUT and NUT are aiming to strengthen regional large-scale joint research and educational collaborations that contribute to the creation of innovative projects based on the research fields of manufacturing and IT supporting Society 5.0. We also aim to strengthen the corporate financial base and management by securing various financial resources and promote the industrial vitalization corresponding to the regional characteristics, creation of new industries, and the regional vitalization.

TUT, NUT, and KOSEN have abundant research ideas covering a wide range of science and technology fields supported by 4,100 faculty members (including technical colleges). Even now, we surpass other national engineering universities in the number and the amount of money devoted to joint research projects. In particular, the small and medium-sized enterprises (SMEs) are outstanding.

If collaborations can be advanced through this project, there is potential for further expansion of joint research. Building a structure and a system that makes it possible to provide total solutions is required in order to respond to increasingly complicated and diversified technologies.

Under the leadership of the President, TUT will take the following measures to answer the above issues:

- Advancement of technology & industry and regional vitalization, using a nationwide network, including TUT, NUT, and KOSEN
- Diversification of financial resources and strengthening the university's management base associated with it
- Effective development of strong skills in IT and AI by providing education for students and adults (recurrent education) resulting in technological and scientific human resources



Fields of Study

Mechanical Engineering

<http://www.me.tut.ac.jp/>



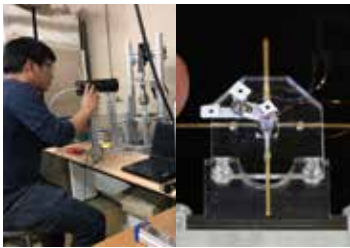
Mechanical Systems Design / Materials and Manufacturing / System Control and Robotics / Environment and Energy

Developing Engineers and Researchers with Problem-Solving Skills

The Department of Mechanical Engineering plays an important role in areas such as energy and environmental systems, materials, transportation, robotics, manufacturing, information technology, biomechanics, and health care - many of which are national priorities.

In order to respond to these demands, the department has set up the four courses of mechanical systems design, materials/production processing, system control/robots, and environment/energy to train students in mechanical engineering and its applied fields more broadly and in greater depth. In addition, the department has established a carefully-thought-out system for tailor-made education according to the aptitude and preferences of each student.

In addition to teaching mechanics, energy, production technology, and system technology that form the basis of mechanical engineering, the department offers education in applied fields such as robots, nanotechnology, BioMEMS, biomedical welfare, environment, and management, etc. In this way, the department is developing human resources who can greatly contribute to the development of future society through manufacturing. Through this education and research, we aim to create a base for new mechanical engineering that will be useful to society and offer mankind greater dreams and hopes for our future.



Electrical and Electronic Information Engineering

<http://www.ee.tut.ac.jp/>



Electronic Materials / Electrical Systems / Integrated Electronics / Information and Communication Systems

Humans, Earth, and eECo*1 Future

The Department of Electrical and Electronic Information Engineering*2 comprises four fields: electronic materials, electrical systems, integrated electronics, and information and communication systems. By collaborating in each field, we aim to develop novel materials and devices for the realization of a sustainable carbon-neutral society, energy utilization technology using AI, and the construction of sensing technology for advanced medical and agricultural fields.

- Electronic materials: Developmental technologies for various new materials are utilized to develop magnetic hologram applications, nanophotonic devices, high-performance hybrid materials, etc.
- Electrical systems: we develop technology to create, transport, store, and utilize the next generation of electrical energy. In addition, we develop the relevant integrated application technology.
- Integrated electronics: we develop opto-electronic devices, smart sensors, biosensors, MEMS, etc., using semiconductor manufacturing facilities in which design, manufacturing, and evaluation are integrated.
- Information and communication systems: We work on developing high-frequency circuits, communication systems, and signal processing for wireless information and power transfer, as well as high-speed processing and security technologies.



Pioneering, advanced engineers equipped with a wide vision and comprehensive cognitive ability are developed through our unique spiral curriculum system of education which spans from the undergraduate level to our doctoral courses. Our students graduate with a mastery of cutting-edge electrical and electronic information engineering, technology, and prioritizing practicality. Also, we closely collaborate with the Electronics-Inspired Interdisciplinary Research Institute (EIIRIS) and its unique educational programs.

*1 eECo (Electrical, Electronic, and Communications)
*2 Type One Electrical Chief Engineer accreditation curriculum

Computer Science and Engineering

<https://cs.tut.ac.jp/>


Computer and Mathematics Sciences / Data Informatics / Human and Brain Informatics / Media Informatics and Robotics

Information and intelligence create the future society

The education and research areas of the Department of Computer Science and Engineering are closely related to each other, and its organizational structure allows us to respond dynamically to the evolution of IT and ICT. With computers at the core of each area, education and research are conducted in a wide range of information processing technologies, from basic technologies to applied technologies, to support the infrastructure of an intelligent, highly information-oriented society. Our priority research areas are as follows: software technology including algorithms and computational theory, computer construction technology including parallel processing and embedded computers, data science using deep learning to analyze big data, Internet application technology using the Web and mobile computers, multimedia information processing including text, voice, images, and graphics, virtual reality, intelligent, interactive, and ubiquitous sensing technologies aimed at symbiosis between humans and robots, investigation of human perception and cognitive mechanisms and their application to communication technologies, understanding and modeling of intelligence in life, nature, and society, and advanced large-scale software system development and its application to computational science. We are also promoting the globalization of education through a double degree program with the University of Eastern Finland and a joint degree program (IMLEX: Imaging and Light in Extended Reality) with universities in Finland, France, and Belgium. We are also offering the Program for Leading Graduate Schools "Training Brain Information Architects" and promoting research activities in close collaboration with the Electronics Institute for Integrated Research and Innovation (EIIRIS) and the Center for Human-Robot Symbiosis Research.



Applied Chemistry and Life Science

<https://chem.tut.ac.jp/>


Molecular Design Chemistry / Molecular Functional Chemistry / Molecular Biological Chemistry

Applied Chemistry and Biotechnology for a Sustainable Future

The Department of Applied Chemistry and Life Science comprises three research fields related to chemistry and bioscience, which are designed to contribute practical applications including sustainable development for human life as well as scientific advancement. The program is designed to equip students with the ability to play active roles in the chemistry and bioengineering fields and to be responsible for the world's most advanced technology. Two courses are provided for this purpose:

The Applied Chemistry Course covers the molecular design chemistry and molecular functional chemistry fields. Students learn fundamental and advanced subjects in physical, analytical, inorganic, and organic chemistry, and chemical engineering, with practical training in experiments and research work. Students also learn advanced subjects such as nanotechnology and material sciences. Laboratory work advances students' perspective in the fundamental and applied chemistry fields.

The Life Science Course covers the molecular biological chemistry field. Students will conduct research on advanced biotechnology for the welfare of humanity. Students learn fundamental and specialized subjects related to molecular biology and genetics for studying living organisms, cell science and neurology for human health and the integration of biological functions with organic chemistry and electronics. Laboratory work develops a broad and versatile perspective on the cross-cutting fields of bioscience and biotechnology.



Architecture and Civil Engineering

<http://www.ace.tut.ac.jp/>


Architecture and Urban Design / Urban and Regional Management

Educating professional engineers to maintain safe and high-quality living environments

The Department of Architecture and Civil Engineering is a new academic field which actively implements elements of social sciences and humanities while integrating the conventional academic fields of architecture and civil engineering. Further, there is an educational program provided to develop engineers with mastery of the above techniques.

In terms of research fields, we cover the two core areas of "architecture and urban design" and "urban and regional management", and our goal is to promote research of design and management. Furthermore, in order to provide society with a high-quality living environment that is both safe and secure, we design urban and regional architecture and civil infrastructure within the context of its natural environment.

In the educational field, our curriculum focuses on the basic research necessary for sustainable development of cities and regions as well as more creative research for generating new value for future society.

In addition, in collaboration with the Research Center for Collaborative Area Risk Management, we are also aiming to foster international engineers who can contribute to the design and management of sustainable social systems that are also safe, secure, and pleasant under the themes of BCP and disaster prevention.



Institute of Liberal Arts and Sciences

<http://las.tut.ac.jp/>


Humanities / Social Science / Natural Science and Basic Engineering / Communication

A foundation in technical science: liberal arts

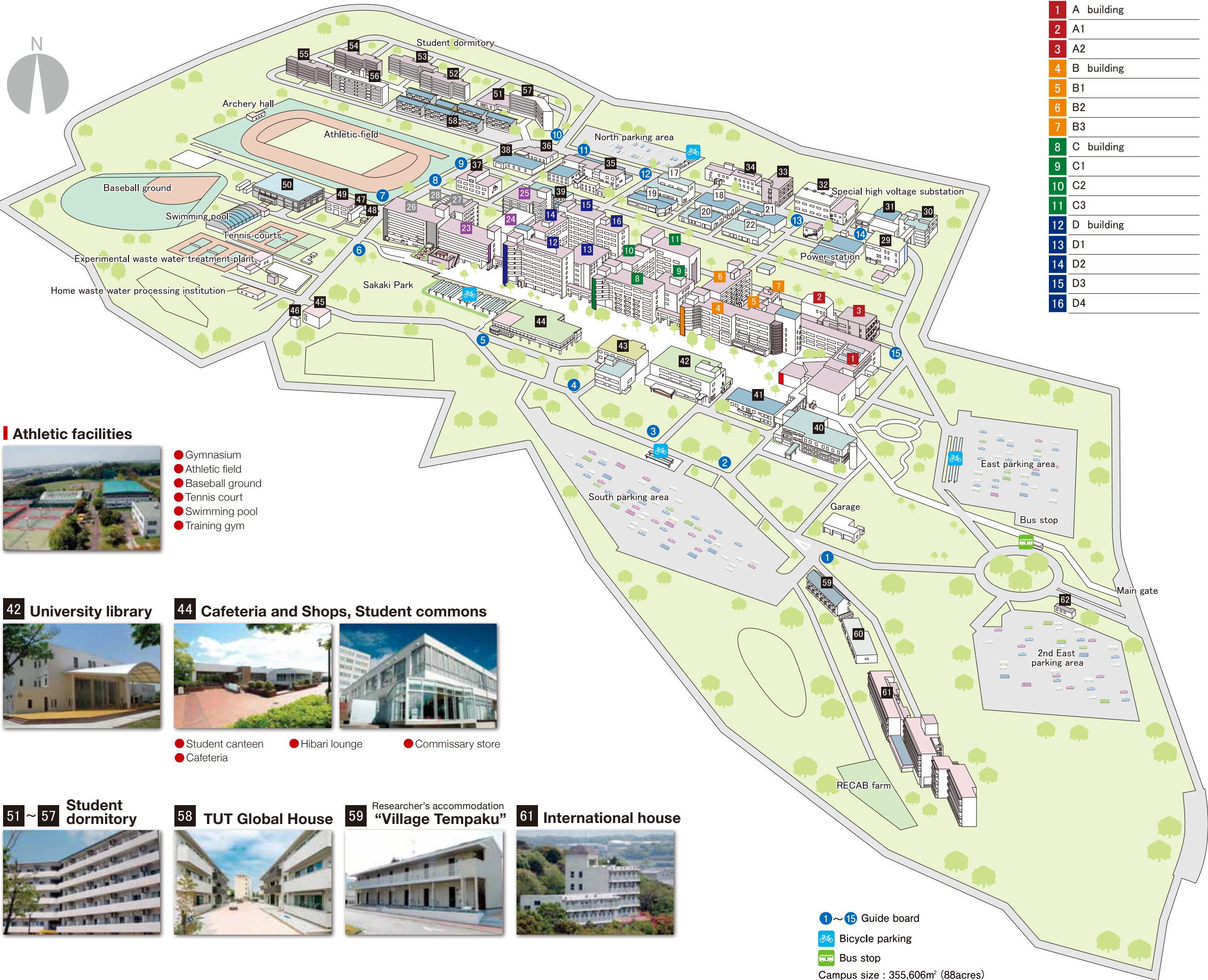
Science and technology raise our living standards. These essential cultural elements are important in the formation and development of a modern society. As global society grows more complex, new challenges arise such as environmental conservation. Facing these challenges, and to ensure sustainable global prosperity, a continual development in science and technology is indispensable.

Within this context, we believe leading engineers should possess a thorough understanding of nature and societal issues, as well as maintaining a global viewpoint from which they can contemplate science and technology's role within the framework of human action.

Meeting this challenge, the Institute of Liberal Arts and Sciences provides education in humanities, social science, natural science, basic engineering, physical education and foreign languages. These disciplines provide a core of general knowledge within the undergraduate curriculum, nurturing basic academic talent, broadening knowledge and deepening international awareness. In the doctoral curriculum, we similarly provide courses in humanities, social science, natural science, and basic engineering, cultivating an open-minded perspective.

The Institute also provides Japanese language and cultural education for international students.





1	A building
2	A1
3	A2
4	B building
5	B1
6	B2
7	B3
8	C building
9	C1
10	C2
11	C3
12	D building
13	D1
14	D2
15	D3
16	D4

17	E experiment building
18	E1
19	E2
20	E3
21	E4
22	E5
23	F building
24	F1
25	F2
26	G building
27	G1
28	Plant factory
29	Electronics-Inspired Interdisciplinary Research Institute (EIIRIS)
30	Venture business laboratory
31	Electron device research center
32	Civil and environmental engineering laboratory
33	Innovation Research Center
34	Natural energy research laboratory
35	Cooperative research facility center
36	Radiation laboratory
37	I-1
38	I-2
39	Manufacturing technology shop
40	Administration bureau
41	Global Engagement Center
42	University library
43	Information and Media Center* Center for IT-Based Education
44	Cafeteria and shops, Student commons
45	Extracurricular activity house
46	Extracurricular activity meeting building
47	Club House
48	Training gym
49	Health care center
50	Gymnasium
51	Student dormitory (Common house)
52	Student dormitory A
53	Student dormitory B
54	Student dormitory C
55	Student dormitory D
56	Student dormitory E
57	Student dormitory F
58	TUT Global House
59	Researcher's accommodation "Village Tempaku"
60	Guest house "Hibari-so"
61	International house
62	University's security

Executive Members

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Director, International Affairs Division	Kuroda Kiyohiko
Director, Research Support Division	Kawai Takahiro
Director, Educational Affairs Division	Nagata Hajime
Director for Information and University Library, Educational Affairs Division	Senoo Hitomi
Director, Student Affairs Division	Homma Kayoko
Director, Entrance Examination Division	Shibata Takehiko

Chairs of Departments

Department of Mechanical Engineering	Izaki Masanobu
Department of Electrical and Electronic Information Engineering	Hozumi Naohiro
Department of Computer Science and Engineering	Kitazaki Michiteru
Department of Applied Chemistry and Life Science	Matsumoto Akihiko
Department of Architecture and Civil Engineering	Saito Taiki
Institute of Liberal Arts and Sciences	Nakamori Yasuyuki

Research Institute for Science and Technology Innovation

Director	Yamamoto Shinichi
Director, Electronics-Inspired Interdisciplinary Research Institute	Sawada Kazuaki
Director, Venture Business Laboratory	Shibata Takayuki
Director, Innovation Research Center	Tanaka Saburo
Director, Research Center for Future Vehicle City	Ohira Takashi
Director, Research Center for Collaborative Area Risk Management	Saito Taiki
Director, Research Center for Agrotechnology and Biotechnology	Eki Toshihiko
Director, Center for Human-Robot Symbiosis Research	Okada Michio
TUT-iSYS International Cooperative Research Laboratory for Advanced Systems Engineering	Uchiyama Naoki
Director, Research Administration Center	Tanaka Saburo

University Library

Director, University Library	Kakuta Noriyoshi
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Joint Use Facilities for Education and Research

Director, Cooperative Research Facility Center	Takikawa Hirofumi
Director, Information and Media Center	Kakuta Noriyoshi
Director, Center for IT-Based Education	Goto Hitoshi
Director, Health Care Center	Kojima Toshio
Director, Student Support Center	Ikematsu Mineo
Director, Global Engagement Center	Nakauchi Shigeki

University-Community Partnership Promotion Center

Director, University-Community Partnership Promotion Center	Kato Shigeru
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Kosen Liaison Center

Director, Kosen Liaison Center	Wakahara Akihiro
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Executive Counselor

Executive Counselor	Ohgai Akira
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Executive Council

President	Terashima Kazuhiko
Research, International Affairs, SDGs, Internal Control	Yamamoto Shinichi
Educational Affairs, Admissions, Environment and Safety, Administration	Kakuta Noriyoshi
Administrative strategy	Kamino Goro

Management Committee

University committee members

President	Terashima Kazuhiko
Executive Trustee, Vice President (Research,International Affairs, SDGs, Internal Control)	Yamamoto Shinichi
Executive Trustee, Vice President (Educational Affairs, Admissions, Environment and Safety, Administration)	Kakuta Noriyoshi
Executive Trustee (Administrative Strategy)	Kamino Goro
Director-General	Abe Hideki

Non-university committee members

Executive Director, Vice President, Nagaoka University of Technology	Wada Yasuhiro
President, Shokei Gakuin University	Goda Takafumi
Mayor of Toyohashi	Asai Yoshitaka
President, National Institute of Technology	Taniguchi Isao
Chairman, Toyohashi University of Technology Alumni Association (Senior Exective Director, Nikken Sekkei Inc.)	Wakabayashi Makoto
Vice Chairman, Toyohashi Chamber of Commerce & Industry	Matsui Takayoshi

Number of staff

As of May, 2021

Board Members		
President	1	6
Executive Trustee	3	
Auditor	2	
Faculty Staff		
Professor	73	218
Associate Professor	82	
Lecturer	6	
Assistant Professor	48	
Research Associate	9	
Administrative Staff		
Administrative Staff	118	143
Technical Staff	24	
Nursing Staff	1	
University Research Administrator (URA)		
URA*	11	11
TOTAL		375

*Three of eleven URA is concurrently serving as Faculty Staff.

Number of students

As of May, 2021

Undergraduate Program

	Quota					Present number of students				
	1st year	2nd year	3rd year	4th year	Total	1st year	2nd year	3rd year	4th year	Total
Mechanical Engineering	20	20	115	115	270	3	16	132	169	320
Electrical and Electronic Information Engineering	15	15	95	95	220	4	19	107	110	240
Computer Science and Engineering	15	15	95	95	220	4	26	103	116	249
Applied Chemistry and Life Science	20	20	75	75	190	3	10	58	64	135
Architecture and Civil Engineering	10	10	60	60	140	3	19	67	83	172
Unallocated	—	—	—	—	—	60	—	—	—	60
	80	80	440	440	1,040	77	90	467	542	1,176

Master's Program

	Quota			Present number of students		
	1st year	2nd year	Total	1st year	2nd year	Total
Mechanical Engineering	105	105	210	110	110	220
Electrical and Electronic Information Engineering	85	85	170	77	85	162
Computer Science and Engineering	85	85	170	78	97	175
Applied Chemistry and Life Science	65	65	130	43	43	86
Architecture and Civil Engineering	55	55	110	57	48	105
	395	395	790	365	383	748

Doctoral Program

	Quota				Present number of students			
	1st year	2nd year	3rd year	Total	1st year	2nd year	3rd year	Total
Mechanical Engineering	8	8	8	24	7	8	16	31
Electrical and Electronic Information Engineering	7	7	7	21	5	4	5	14
Computer Science and Engineering	8	8	8	24	9	7	11	27
Applied Chemistry and Life Science	6	6	6	18	1	3	9	13
Architecture and Civil Engineering	5	5	5	15	5	5	8	18
	34	34	34	102	27	27	49	103

Student affiliation by location of alma mater

As of May, 2021

	Prefectures	Undergraduate	Master's	Doctoral	Total		Prefectures	Undergraduate	Master's	Doctoral	Total
Hokkaido/Tohoku	Hokkaido	68	60	3	131	Kinki	Mie	34	28	3	65
	Aomori	12	3	0	15		Shiga	2	1	0	3
	Iwate	27	9	1	37		Kyoto	25	24	0	49
	Miyagi	9	13	0	22		Osaka	18	6	1	25
	Akita	7	5	0	12		Hyogo	41	23	0	64
	Yamagata	4	5	1	10		Nara	13	11	1	25
	Fukushima	7	4	1	12		Wakayama	17	9	0	26
							Tottori	11	5	1	17
Kanto	Ibaraki	26	9	0	35	Chugoku	Shimane	8	12	2	22
	Tochigi	18	17	2	37		Okayama	16	15	2	33
	Gunma	10	7	1	18		Hiroshima	15	15	1	31
	Saitama	2	0	0	2		Yamaguchi	19	12	1	32
	Chiba	16	10	1	27		Tokushima	25	12	1	38
	Tokyo	46	32	3	81	Shikoku	Kagawa	40	20	1	61
	Kanagawa	4	3	1	8		Ehime	11	10	2	23
							Kochi	8	6	0	14
Chubu	Niigata	13	9	2	24	Kyushu/Okinawa	Fukuoka	35	29	3	67
	Toyama	8	16	1	25		Saga	0	0	0	0
	Ishikawa	34	27	0	61		Nagasaki	9	5	1	15
	Fukui	25	12	0	37		Kumamoto	14	4	1	19
	Yamanashi	0	0	0	0		Oita	6	6	1	13
	Nagano	17	20	0	37		Miyazaki	9	2	1	12
	Gifu	27	20	1	48		Kagoshima	7	11	0	18
	Shizuoka	66	39	2	107		Okinawa	11	10	0	21
	Aichi	236	111	17	364		International	91	40	43	174
							Others	9	1	0	10
	Total							1,176	748	103	2,027

Number of international studentsAs of May, 2021

Countries or districts	Undergraduate students	Graduate school students		Research students	Short-term students, etc	Total
		Master's course	Doctoral course			
Asia						
Malaysia	68	15	2	0	0	85
Mongolia	42	9	1	0	0	52
Vietnam	29	2	2	0	0	33
Indonesia	6	6	15	0	0	27
China	2	7	2	1	0	12
Laos	7	2	1	0	0	10
Pakistan	1	5	1	0	0	7
Cambodia	5	0	0	0	0	5
India	0	2	2	0	0	4
Bangladesh	0	0	4	0	0	4
Myanmar	0	1	1	0	0	2
South Koria	2	0	0	0	0	2
Sri Lanka	0	1	0	0	0	1
Taiwan	0	1	0	0	0	1
East Timor	0	1	0	0	0	1
Central and South America						
Mexico	1	1	1	0	0	3
Guatemala	1	0	0	0	0	1
Columbia	1	0	0	0	0	1
Peru	0	0	1	0	0	1
Europe						
Finland	0	3	0	0	0	3
Germany	0	1	1	0	0	2
Middle East						
Afghanistan	0	7	2	0	0	9
Africa						
Egypt	0	0	4	0	0	4
Tanzania	0	0	3	0	0	3
Zambia	1	0	0	0	0	1
Tunisia	0	0	0	1	0	1
Morocco	0	0	1	0	0	1
Rwanda	0	0	1	0	0	1
Total	166	64	45	2	0	277

Where international graduates are employed

KIOXIA Corporation	Musashi Seimitsu Industry Co., Ltd.
Honda Motor Co., Ltd	Business Engineering Corporation (B-EN-G)
Citizen Watch Co., Ltd.	AWL, Inc.
Murata Manufacturing Co., Ltd.	Micron Memory Japan, G.K.
NISSAN AUTOMOTIVE TECHNOLOGY CO., LTD.	Sumitomo Electric Optifrontier Co., Ltd.
Sumitomo Electric Industries, Ltd.	Toyo Engineering Corporation
Sony Semiconductor Solutions Corporation	Nippon Koei Co., Ltd.
Sony Global Manufacturing & Operations Corporation	P.S. Mitsubishi Construction Co., Ltd.
Hino Motors, Ltd.	BKR DESIGN OFFICE
Hanken Works Ltd	Nagaoka University of Technology
ULVAC (SUZHOU) CO., LTD.	Morpho, Inc.
Yamaha Corporation	

and more

Academic exchange agreementsAs of May, 2021


**India**

- Indian Institute of Technology Madras
- Indian Institute of Technology Delhi

- Indian Institute of Science, Bangalore


**Bangladesh**

- University of Chittagong

**Thailand**

- Faculty of Engineering, Chulalongkorn University
- Pathumwan Institute of Technology
- Thammasat University

- Thai-Nichi Institute of Technology
- Ubon Ratchathani University
- National Science and Technology Development Agency
- Burapha University


**Malaysia**

- Universiti Sains Malaysia
- Wawasan Open University and DISTED College

- Universiti Malaysia Perlis
- Universiti Tun Hussein Onn Malaysia

**Singapore**

- Nanyang Technological University

**Indonesia**

- Institut Teknologi Bandung
- Syah Kuala University
- Hasanuddin University
- Andalas University
- Universitas Sumatera Utara
- University of Lampung
- University of Palangka Raya
- Tadulako University

- University of Brawijaya
- Padang Institute of Technology
- Electronic Engineering Polytechnic Institute of Surabaya
- University of Udayana
- Universitas Pertamina
- Diponegoro University

**South Korea**


- Kyungpook National University
- Seoul National University of Science and Technology
- Korea University of Technology and Education
- Andong National University

**Mongolia**

- New Mongol Academy

**Vietnam**

- Vietnam National University-Ho Chi Minh City University of Technology
- The University of Danang, Danang University of Science and Technology
- Ho Chi Minh City University of Natural Resources and Environment
- Hue University of Medicine and Pharmacy
- National University of Civil Engineering
- Viet Nam National University Ho Chi Minh City

**China**

- Northeastern University
- College of Chemistry and Molecular Engineering, Peking University
- Xi'an Jiaotong University

- Chang'an University
- Huazhong University of Science and Technology

**Laos**

- National University of Laos

**Taiwan**

- National Chiao Tung University

- National Taiwan Normal University

**Turkey**


- Koc University

**Egypt**

- Assiut University

**New Zealand**

- The Faculty of Engineering of the University of Auckland

**USA**

- University of California, Berkeley
- University of Wisconsin-Madison
- Queens College of the City University of New York
- University of California, San Diego
- Michigan Technological University

- The University of Kentucky
- The University of Texas Southwestern Medical Center
- Lehman College of the City University of New York
- San Diego State University

**Mexico**

- Centro de Investigación en Materiales Avanzados Advanced Materials Research Center
- Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional
- Technological Institute of San Juan del Rio

**Argentina**

- Universidad Nacional de Tucumán

**United Kingdom**


- Faculty of Sciences, University of York

**Finland**

- The Faculty of Science and Forestry of the University of Eastern Finland

**Norway**

- Faculty of Health Sciences, UiT-The Arctic University of Norway


**Netherlands**

- Eindhoven University of Technology, School of Innovation Sciences

**Germany**

- Ruhr-Universität Bochum
- Technische Universität München

- Universität Stuttgart

**France**

- University of Franche-Comté
- Pierre et Marie Curie University
- Chimie ParisTech/ L'école Nationale Supérieure de Chemie de Paris

- ECE Paris- Graduate School of Engineering
- Exole Supérieure d'Ingenieurs En Electronique Et Electronique d'Amiens

**Spain**

- The Technical University of Madrid

- University of Granada

**Italy**

- University of Cagliari

- University of Padova

**Bulgaria**

- Institute of Organic Chemistry with Centre of Phytochemistry of the Bulgarian Academy of Sciences


**Russia**

- M.V.Lomonosov Moscow State University
- Moscow Institute of Physics and Technology

- Skolkovo Institute of Science and Technology

**Slovakia**

- University of Zilina

**Ukraine**

- Institute of Bioorganic Chemistry and Petrochemistry of National Academy of Sciences of Ukraine
- Institute for Food Biotechnology and Genomics of National Academy of Sciences of Ukraine
- Institute for Applied System Analysis and the World Data Center for Geoinformatics and Sustainable Development of National Technical University of Ukraine "Kyiv Polytechnic Institute"

Toyohashi city

Toyohashi City is located in the southeastern corner of Aichi Prefecture, and is both the cultural and industrial center of the East-Mikawa area.

Aichi is centrally located on the main Japanese island of Honshu, and was host to many of the great feudal warlords who shaped the history of Japan. In modern times, many great companies are headquartered in Aichi, including Toyota Motor Corporation, Nippon Sharyo (railway rolling stock manufacturer) and Noritake (tableware manufacturer).

As one of Japan's 'core cities', Toyohashi has everything you'd expect to find in a major city, but it maintains a friendliness, as well as a love of Japanese tradition, that bigger cities often forget.

Toyohashi has a mild climate, a low cost of living and is within easy reach of Nagoya, Tokyo, Osaka, Kyoto and Kobe by *Shinkansen*, or bullet train.

Toyohashi also has a wonderful natural environment, surrounded by the sea and mountains. This natural bounty means that there are many interesting places to visit.

The vast expanse of the Pacific Ocean is only a short bicycle ride away to the south of TUT's campus. There you will find Japan's longest beach, Omote-hama. This beach is popular for a variety of activities such as surfing, fishing and picnicking, and is also a famous spawning site for the loggerhead sea turtle.

The north of the city is bordered by Mt. Ishimaki, and the hills to the east are home to popular attractions like the Toyohashi Nature Walk and Imo Bog. The powerful Toyo River flows through the city, blending with the surrounding greenery to create a beautiful landscape.



Yoshida Castle



Oni Matsuri
(Ogre Festival)



Tezutsu Hanabi
(Arm-held Fireworks)



Toyohashi City area



Toyohashi Museum of Natural History



Ikobe Beach

Public relations



University official website
<https://www.tut.ac.jp/english/>



University official SNS
Please check out TUT's Facebook, Twitter and YouTube.

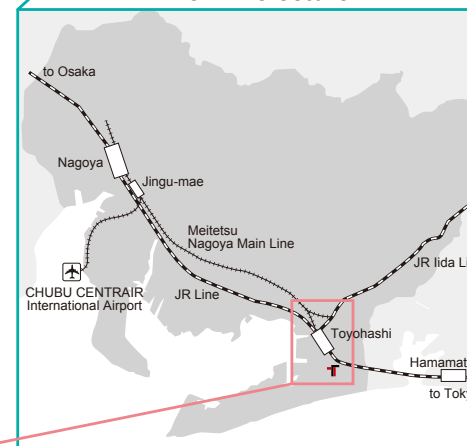


TUT Research < Published quarterly >
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<https://www.tut.ac.jp/english/newsletter/>

Access



Aichi Prefecture



From Chubu International Airport to Toyohashi

Take any Meitetsu trains from the airport, and change trains at "Jingu-mae" to board a train for Toyohashi. It takes about 20-30 minutes from airport to Jingu-mae, and around 50 minutes from Jingu-mae to Toyohashi.

By train to Toyohashi station

From Nagoya : Meitetsu train, JR train or Shinkansen are available.

It takes about 50 minutes from Nagoya to Toyohashi by Meitetsu or JR train, and 25 minutes by Shinkansen.

From Tokyo : Shinkansen Hikari super express runs every two hours, takes 1h30 to get to Toyohashi station. Shinkansen Kodama runs every 30 minutes, and takes about 2h15.

Coaches are also available from Tokyo (Shinjuku) to Toyohashi.

From Osaka : Take the Nozomi super express to Nagoya, then change to Kodama or Hikari, or local trains. It takes about 80-120 minutes total.

From Toyohashi station to the campus

Toyotetsu bus runs from Toyohashi station to the campus every 10-15 minutes from 7am to 9pm.

Take the bus destination "Gikadaai-mae," "Rispa Toyohashi," or "Fukushi-mura" from bus stop No. 2 at Toyohashi station, east exit.

By road to the campus

Tomei Express Way : Exit at Toyokawa IC toward Toyohashi city center (Route 151 and Route 1). From Toyohashi city center, take route 259 and 405. It takes approximately 20 minutes.

Route 23 (Toyohashi Bypass) from Nagoya : Exit from route 23 at Nanane IC, and turn left (take route 405). TUT campus is right next to this route.

Contact

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