千葉工業大学
CHIBA INSTITUTE OF TECHNOLOGY

CHIBA INSTITUTE OF TECHNOLOGY

2023.9

Founding Spirit

Contributing to the world culture with technology

Educational Goals

With education that encompasses the symbiotic spirit of the
“professors and students moving towards the same goal,” we strive to:

- Foster talented people who have a passion for learning that inspires them to broadly seek knowledge in the world.
- Foster talented people who independently learn, think, and create.
- Foster talented people who are free-hearted and sharp-minded.
- Foster talented people who can build up good neighborly relations and partnerships.
- Foster talented people who are culturally sensitive and who have high-level expert knowledge, being both academically and technically outstanding in their field.

Admission Policy of Undergraduate Courses

We seek students who understand the basic educational principles presented in the founding spirit and its educational goals, who have a strong interest in the institute’s research, and who desire to improve themselves and master knowledge as engineers. Such students should also have the competence to grow into engineers equipped with both high-level expert knowledge and rich culture.

Admission Policy of Graduate Courses

We seek students who understand the basic educational principles presented in the founding spirit and its educational goals, who have a strong will to contribute to increasingly sophisticated scientific and research disciplines, and who seek to independently learn advanced specialist/interdisciplinary knowledge and skills, while also having the desire to commit to new creations through applying such knowledge and skills. In other words, we seek students who have the competence to grow into high-level expert engineers and researchers equipped with both the power to act and to create on the basis of advanced expertise.

C O N T E N T S

Present and Former Chairmen and Presidents

Chiba Institute of Technology was established in 1942, as Koa Institute of Technology, in Tokyo, in response to growing social demand for technology education. In 1946, the university was relocated to Chiba, and was renamed the Chiba Institute of Technology. In 2016, the Faculty of Engineering was reorganized into 5 faculties and 17 departments including the Faculty of Engineering, the Faculty of Creative Engineering, the Faculty of Advanced Engineering, the Faculty of Information and Computer Science, and the Faculty of Social Systems Science. Also, in 2024, the Faculty of Information and Computer Science and the Faculty of Social Systems Science will undergo a significant transformation as it becomes the Faculty of Innovative Information Science and the Faculty of Innovative Management Science as appropriate to leading the future with information. The Graduate School of Engineering, the Graduate School of Creative Engineering, the Graduate School of Advanced Engineering, the Graduate School of Information and Computer Science, and the Gradual School of Social Systems Science are home to 15 majors, making CIT one of the largest technology institutes in Japan with nearly 10,000 students.
In a period in which the public interest in creative design has grown significantly in the world wide level, the Chiba Institute of Technology is taking on a role as the flagship technological university, an undergraduate course whose students are studying for having the strength to compete in international contests, and graduate schools whose students and faculty are doing research in areas of great interest and importance.

The 12th chairman
Osamu Setokuma
(2012 ～)

The 14th president
Joichi Ito
(2023 ～)

Founding Chairman and President
Kuniyoshi Obara

Former Chairmen

Minoru Togo	(1942 ～ 1943)
Satoru Mori	(1943 ～ 1947)
Yasujiro Hasegawa	(1947 ～ 1948)
Toru Sakuma	(1948 ～ 1949)
Takashi Tanaka	(1949 ～ 1950)
Morinosuke Kawasaki	(1950 ～ 1959)
Shojiro Kawashima	(1959 ～ 1969)
Keiichiro Usami	(1969 ～ 1974)
Fusao Sekino	(1974 ～ 1980)
Shinji Fukui	(1980 ～ 1986)
Kosaku Toyota	(1986 ～ 2012)

Former Presidents

Shigenao Konishi	(1942 ～ 1947)
Kan’ichi Terazawa	(1947 ～ 1949)
Keikichi Tanaka	(1949 ～ 1957)
Masanori Sato	(1959 ～ 1962)
Sadao Horiguchi	(1962 ～ 1971)
Shinji Fukui	(1971 ～ 1975)
Takeo Fukuda	(1975 ～ 1979)
Yasuo Aoki	(1979 ～ 1983)
Hisafuji Watanabe	(1983 ～ 1996)
Hidetaka Uno	(1996 ～ 2004)
Seiichi Motooka	(2004 ～ 2012)
Kazuhito Komiya	(2012 ～ 2020)
Takafumi Matsui	(2020 ～ 2023)

History

In step with Japanese manufacturing.
CIT is continually evolving to meet the needs of the future.

1942 Established on May 15 in Machida-shi, Tokyo as Koa Institute of Technology.

1946 Transferred to Kimitsu-shi, Chiba and renamed Chiba Institute of Technology.

1950 Transferred to Narashino-shi, Chiba, in the Keiyo Industrial Area near Tokyo, and established undergraduate day courses for Mechanical Engineering, Metallurgical Engineering and Industrial Management and evening courses of Mechanical Engineering, Metallurgical Engineering, and Industrial Management.

1953 Undergraduate day course for Electrical Engineering established.

1955 Undergraduate evening course for Electrical Engineering established.

1961 Undergraduate day courses for Electronic Engineering and Industrial Chemistry established.

1963 Undergraduate day courses for Civil Engineering and Architecture established.

1965 Master's degree courses for Metallurgical Engineering and Industrial Chemistry established.

1966 Undergraduate day course for Precision Engineering established.

1987 Master's degree course for Civil Engineering established.

1988 Undergraduate day courses for Computer Science and Industrial Design established.

1989 Doctoral degree courses for Metallurgical Engineering and Industrial Chemistry and master's degree courses for Mechanical Engineering, Electrical Engineering, Electronic Engineering, and Architecture established.

1990 Undergraduate evening courses for Electronic Engineering, Computer Science, and Architecture established. Doctoral course for Civil Engineering and master's degree course for Precision Engineering established.

1991 Doctoral courses for Mechanical Engineering and Electrical-Electronic Engineering established.

1992 Doctoral courses for Architecture and Precision Engineering and master's degree courses of Computer Science and Industrial Design established.

1994 Doctoral courses for Computer Science and Industrial Design established.

1995 Master's degree course for Management and System Engineering established.

1997 Undergraduate day courses for Information and Network Science, and Project Management established.

1998 Doctoral degree course for Management and System Engineering established.

1999 Day and evening courses launched at all 11 undergraduate departments of the Faculty of Engineering except for Information and Network Science, and Project Management.

2001 The Faculty of Engineering reorganized to newly set up the Faculty of Information and Computer Science, which consists of the Computer Science and Information and Network Science, and the Faculty of Social Systems Science, which consists of Management Information Science and Project Management.
Day and evening courses introduced in all undergraduate departments.

2003 The nine undergraduate departments in the Faculty of Engineering were reorganized into five departments: Mechanical Science and Engineering; Electrical, Electronics and Computer Engineering; Life and Environmental Sciences; Architecture and Civil Engineering; and Design. The flextime system was introduced in all undergraduate departments. The Future Robotics Technology Center (fuRo) was established.

2004 The Graduate School of Engineering was reorganized and the following programs were established. In the Graduate School of Engineering: the Master's Program in Mechanical Science and Engineering; the Master's Program in Electrical, Electronics and Computer Engineering; the Master's Program in Life and Environmental Sciences; the Master's Program in Architecture and Civil Engineering; the Master's Program in Design; Doctoral Program in Engineering. In the Graduate School of Information and Computer Science: the Master's Program and Doctoral Program in Information and Computer Science. In the Graduate School of Social Systems Science: the Master's Program and Doctoral Program in Management Science.

2006 Department of Advanced Robotics was established under the Faculty of Engineering.

2008 The flextime system was discontinued at all undergraduate departments.

2009 Department of Risk Science in Finance and Management was established under the Faculty of Social Systems Science. Master's Program in Advanced Robotics in the Graduate School of Engineering was planned to start. Planetary Exploration Research Center (PERC) was opened.

2012 Established the Tokyo Skytree Town® Campus Area I

2014 Established the Tokyo Skytree Town® Campus Area II. Student dormitories (Soho and Tsubaki) and athletic ground on Shin-Narashino Campus were completed. Indoor Gym for Akanehama Ground was completed.

2015 Established the Software Technology and Artificial Intelligence Research Laboratory (STAIR Lab).

2016 The Faculty of Engineering was reorganized into the newly established Faculty of Engineering (Departments of Mechanical Engineering, Innovative Mechanical and Electronic Engineering, Advanced Materials Science and Engineering, Electrical and Electronic Engineering, Information and Communication Systems Engineering, and Applied Chemistry), Faculty of Creative Engineering (Departments of Architecture, Civil and Environmental Engineering, and Design), and Faculty of Advanced Engineering (Departments of Advanced Robotics, Life Science, and Advanced Media). New cafeteria and gymnasium on Shin-Narashino Campus were completed. The Global Finance Research Center (GiFr) and the Ocean Resource Research Center for Next Generation (ORCeNG) were established.

2017 Established the Ocean Resource Research Center for Next Generation (ORCeNG).
Established the Panasonic / Chiba Institute of Technology Industry - Academic Collaboration Center.

2018 60 rooms added to Tsubaki Dormitory (women's dormitory).

2019 Established the Institute for Geo-Cosmology (Geo-Cosmo Inst.).

2020 The Graduate School of Engineering was reorganized into the Graduate School of Engineering (Programs in Mechanical Engineering, Innovative Mechanical and Electronic Engineering, Advanced Materials Science and Engineering, Electrical and Electronic Engineering, Information and Communication Systems Engineering, and Applied Chemistry), the Graduate School of Creative Engineering (Programs in Architecture, Civil and Environmental Engineering, and Design), and the Graduate School of Advanced Engineering (Programs in Advanced Robotics, Life Science, and Advanced Media).

2021 Research Center for Mathematical Engineering (RCME) established, Center for Radical Transformation (CRT) established.

2022 80th anniversary of Chiba Institute of Technology.

2024 Faculty of Information and Computer Science reorganized into three subjects: the Faculty of Innovative Information Science/Department of Computer Science, the Department of Cognitive and Information Sciences, and the Department of Applied Informatics. Faculty of Social Systems Science reorganized into two subjects: the Faculty of Innovative Management Science/Department of Digital Transformation, and the Department of Business System Design and Management.

Academic Organization

Education and research organization

- Chiba Institute of Technology
  - Undergraduate Courses
    - Faculty of Engineering
      - Department of Mechanical Engineering
      - Department of Innovative Mechanical and Electronic Engineering
      - Department of Advanced Materials Science and Engineering
      - Department of Electrical and Electronic Engineering
      - Department of Information and Communication Systems Engineering
      - Department of Applied Chemistry
    - Faculty of Creative Engineering
      - Department of Architecture
      - Department of Civil and Environmental Engineering
      - Department of Design
    - Faculty of Advanced Engineering
      - Department of Advanced Robotics
      - Department of Life Sciences
      - Department of Advanced Media
    - Faculty of Innovative Information Science ※
      - Department of Computer Science
      - Department of Congnitive and Information Sciences
      - Department of Applied Informatics
    - Faculty of Innovative Management Science ※
      - Department of Digital Transformation Science
      - Department of Business System Design and Management
  - Graduate Courses
    - Graduate School of Engineering
      - Master's Program
        - Master's Program in Mechanical Engineering
        - Master's Program in Innovative Mechanical and Electronic Engineering
        - Master's Program in Advanced Materials Science and Engineering
        - Master's Program in Electrical and Electronic Engineering
        - Master's Program in Information and Communication Systems Engineering
        - Master's Program in Applied Chemistry
      - Doctoral Program
        - Doctoral Program in Engineering
    - Graduate School of Creative Engineering
      - Master's Program
        - Master's Program in Architecture
        - Master's Program in Civil and Environmental Engineering
        - Master's Program in Design
    - Graduate School of Advanced Engineering
      - Master's Program
        - Master's Program in Advanced Robotics
        - Master's Program in Life Science
        - Master's Program in Advanced Media
    - Graduate School of Information and Computer Science
      - Master's Program
        - Master's Program in Information and Computer Science
      - Doctoral Program
        - Doctoral Program in Information and Computer Science
    - Graduate School of Social Systems Science
      - Master's Program
        - Master's Program in Management Science
      - Doctoral Program
        - Doctoral Program in Management Science
  - Future Robotics Technology Center (fuRo)
  - Planetary Exploration Research Center (PERC)
  - Software Technology and Artificial Intelligence Research Laboratory (STAIR)
  - Research Center for Mathematical Engineering(RCME)
  - Ocean Resource Research Center for Next Generation (ORCeNG)
  - Institute for Geo-Cosmology (Geo-cosmo Inst.)
  - Center for Radical Transformation(CRT)

※ To be established April 2024

Campus.1

Tsudanuma Campus

Tsudanuma Campus has many buildings containing laboratories, lecture rooms, and lecture halls equipped with advanced facilities. 3rd and 4th year undergraduate and graduate students study at this campus. The landscaped campus has attractive pathways lined with gingko trees. Redevelopment of the campus is currently under way and new twin tower buildings are core plan of constructing: Building No. 2 was completed in August 2008, and Building No. 1 was completed in March 2011. Building No. 4 was reopened after refurbishment in May 2012.

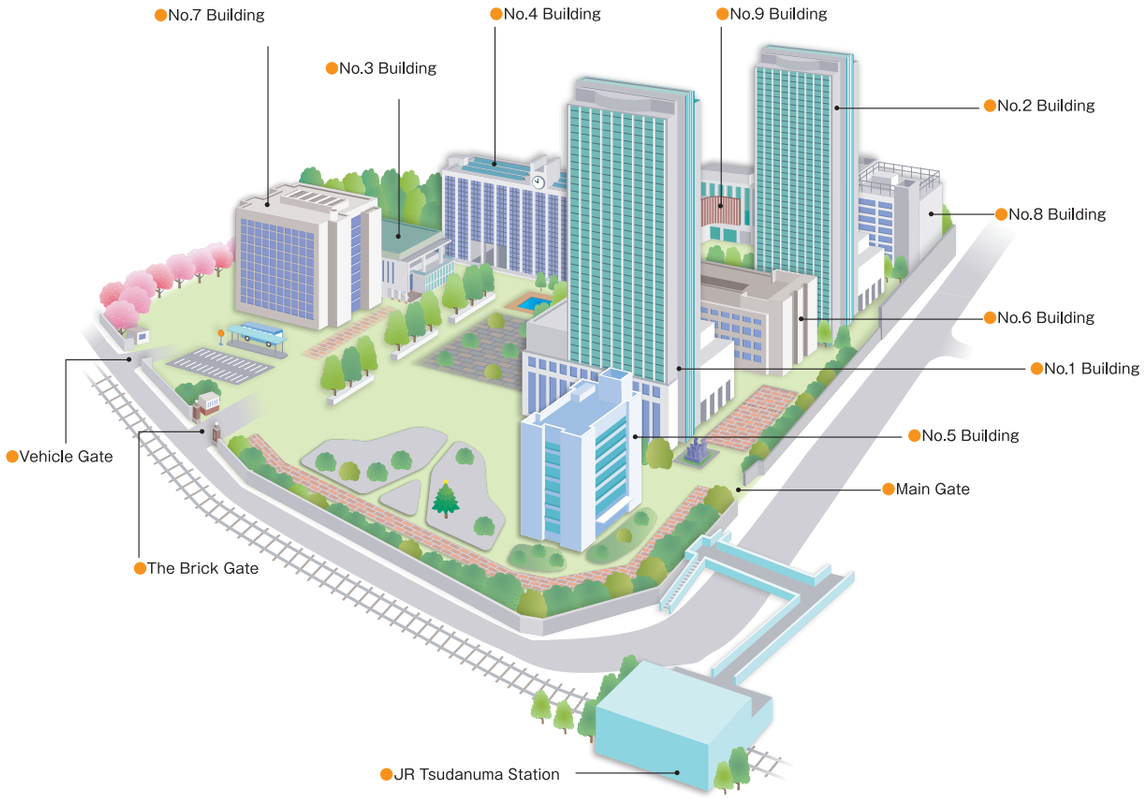
[Tsudanuma Campus Map]

●Computer Center

The Computer Center has labs where students may use virtual machines to learn as well as computer graphics, computer-aided design, biosimulation, and other software applications, which companies actually utilize.

●The Brick Gate

The Akarenga, or red brick gate, is a familiar landmark among local people and was designated a national tangible cultural property in 1998 for its contribution to the historical landscape.

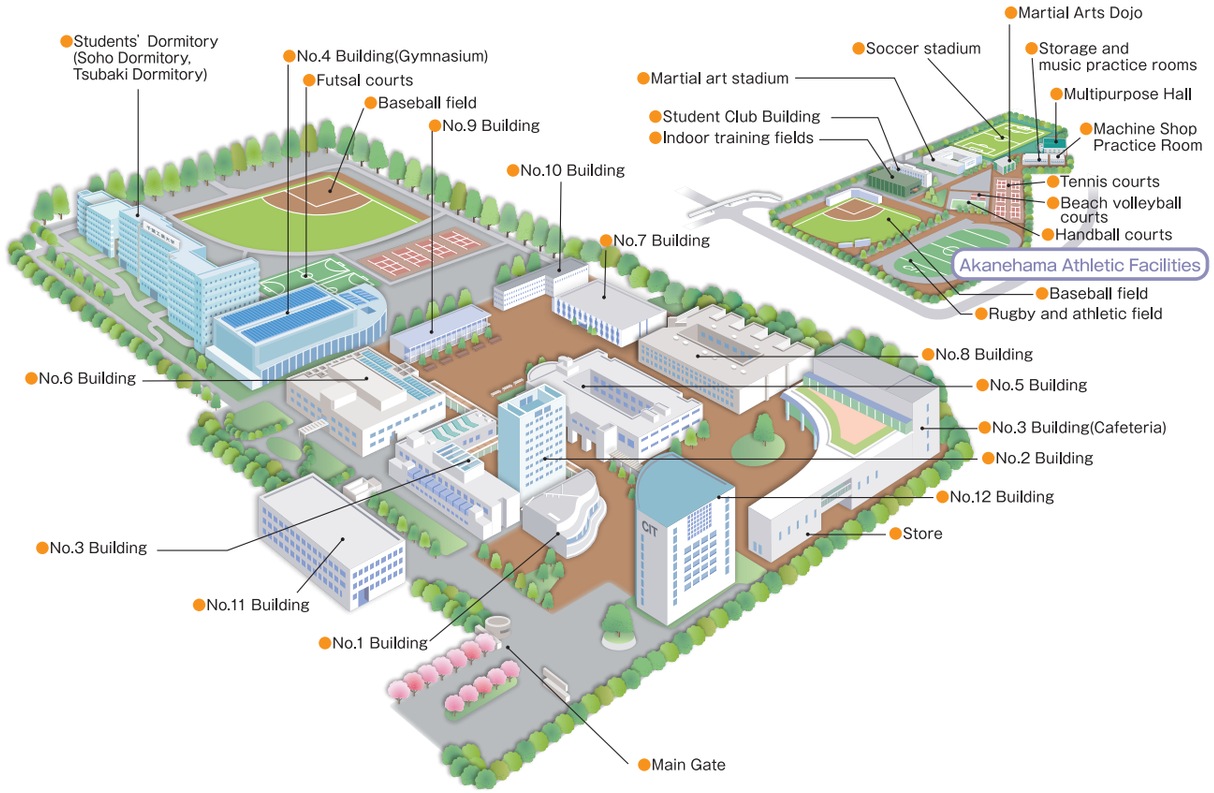


Campus.2

Shin-Narashino Campus

Opened in 1986, the Shin-Narashino Campus has intelligent buildings with the advanced technology. Building No. 12 is provided with facilities for student welfare, such as an observation lounge and an athletics gym. Separate dormitories for men and women were completed in March 2014, and a new gymnasium, cafeteria, and student dormitory were completed in March 2016.

[Shin-Narashino Campus Map]



●Shin-Narashino Library

The library has an extensive collection of materials, focusing on books for student study. It also has private-study rooms and an AV corner.

●Soho Dormitory･Tsubaki Dormitory

There is also a women's dormitory, and CIT is one of the few technical institutes to have one. Currently, Soho Dormitory (men's dormitory) has 496 rooms and Tsubaki Dormitory (women's dormitory) has 116 rooms. Currently, Soho Dormitory (men's dormitory) has 496 rooms and Tsubaki Dormitory (women's dormitory) has 116 rooms.

Campus.3

Tokyo SkytreeTown® Campus

A new campus of the Chiba Institute of Technology, the Tokyo Skytree Town® Campus, came into being at Tokyo Skytree® which opened on May 22, 2012. It is open to the public as an experiential action zone, applying the leading edge technologies developed through the research activities at CIT. Here, everyone is free to experience the technology of the future.

In Area I, the Robot Zone, the research results of Chiba Institute of Technology's Future Robotics Technology Center (fuRo) are on display. In addition to demonstrating the successor to the disaster relief robot deployed at the site of the Fukushima Daiichi Nuclear Power Plant as well as the 3D CAD image projection system for the latest robot developed by fuRo, there is also a display exhibiting wheelchair racers able to enjoy a virtual-reality experience of Tokyo in the year 2100, for which fuRo extended technical assistance to design and develop the controller.

In Area II, the Planetary Exploration Zone, visitors can see a spectacular full-scale model of Hayabusa2, watch 3D films on a 300-inch screen in our Space Theater, enjoy attractions using the latest augmented reality (AR) technology, tour the solar system using a touch panel, and witness other achievements of the Planetary Exploration Research Center (PERC).

The Tokyo Skytree Town Campus is intended to develop continuously in step with the functions and roles required by the times, forming a bridge linking individuals, the university and society at large.

●Disaster relief robot

Chiba Institute of Technology's disaster relief robot is the first Japanese robot deployed during the accident at Fukushima Daiichi Nuclear Power Plant, which occurred following the Great East Japan Earthquake in 2011. We started addressing the incident right after its occurrence, and have repeatedly modified our robots through communication with the local workers at the Fukushima Plant. CIT has developed everything that is necessary - radiation resistance, heat and shock resistance, ability to climb a gradient over 60 degrees, a training site for robot manipulation for local workers, training manuals, operator training programs, and more. It has been operating in the reactor buildings inaccessible to humans, conducting surveys, collecting data, and helping the tasks of decommissioning the reactors.

●A grand tour of the solar system

Take a virtual tour of the solar system by operating a 120-inch touch screen. On this virtual tour, you can visit the main celestial bodies forming the solar system including eight planets, and complete a mission of planetary exploration. Data of this system is provided by NASA and other space organizations. You can enjoy many beautiful images of the solar system obtained through research and exploration to date, and access the latest information.

●300-inch 3D space theater

Enjoy powerful 3D images on a 300-inch screen with 5.1 surround sound. A 13.8 Billion-Year Space Journey-The Earth and Life, a movie is produced with the full direction by Koichi Kawakita, overall director of Godzilla, is shown regularly in the theater. This 15-minute film looks back at the history of the earth starting from the Big Bang.

fuRo Future Robotics Technology Center

Future Robotics Technology Center

Creating an exciting future with robotics

It was 20 years ago that the Future Robotics Technology Center was established. We have launched numerous innovative robots, which have never been seen before anywhere in the world. fuRo has embraced three themes.

The first is to create technology of the future. fuRo is an organization where robotics and mechatronics professionals have come together to develop world-class robot technology. We anticipate the future yet to arrive and develop technology that will inspire everyone.

The second is to use the technology that we develop to change the world. In 2017, we started a joint project with the major home appliance manufacturer Panasonic. In the first phase, we developed a next generation vacuum cleaning robot swiftly in a mere three months. We incorporate our proprietary technology to create a range of intelligent home appliances for everyone's residence. For us, this challenge has the potential to change not only Japan's industrial structure but also the history of manufacturing itself.

The third is to train the future generation to whom developed technologies will be passed on to and enable them to further develop these. Many CIT students are involved in our projects. Together, we develop technology of the future and engage in innovative projects with companies. Students are refining technology and, through this experience, gaining wealth that will be treasured all their lives. Would you also like to try to find something that you could spend your life creating?

General Manager of fuRo
Takayuki Furuta

Projects

Overturning conventional concepts of what a vehicle is Developing the future of mobility

Halluc IIx, the future of mobility capable of going anywhere without restriction, is a robot realizing a new concept of what a "vehicle" is. The previously non-existent eight-wheeled robot flexibly adapts to a variety of conditions, uneven road surfaces too.

The ILY-A, a three-wheeled single-rider motorized small mobility vehicle, was developed with the concept of being the "legs of the near future." Anyone from young people to active seniors may use it as they move about experiencing the different lifestyles of a variety of generations. The current transportation equipment functions of the bicycle, mobility scooter, cart and kickboard are integrated into one unit. It has been selected as an official vehicle for the Tokyo Summer Olympics in 2021.

The artificial intelligence-equipped CanguRo was developed on the theme of a "new relationship between person and vehicle." Of course, people may use it in the manner of a vehicle to move around. It is also equipped to function as a partner, always staying next to its master. At times, it follows its master helping with the shopping and will catch up right away when fetched remotely via a smart phone, tablet, PC or other device.

Photo : Seiji Mizuno

Collaborative projects with companies Generating innovation around the world

The Reactor Response Robot, developed by fuRo, has performed remarkably inside the Fukushima Daiichi Nuclear Power Plant buildings damaged during the Great East Japan Earthquake. It has also won high acclaim as it has been the only robot capable of functioning in severe environments exposed to high levels of radiation where no person is able to even enter. The Reactor Response Robot gone through a series of updates and is currently in its sixth generation. It has even been selected by the Mihama Nuclear Emergency Assistance Center in preparation for a nuclear accident and is the national standard for robots in both name and reality.

In addition, T-iROBO Rebar, an automated reinforcing steel bar binding robot jointly developed with Taisei Corporation, has transformed the way such work is performed at construction sites. The robot has automated the work of tying rebar intersections, which had previously been done manually. The robot has reduced the labor involved and improved work efficiency at construction sites.

Furthermore, we worked with major appliance manufacturer Panasonic on developing a next-generation robot vacuum cleaner concept model driven by AI and IoT. Panasonic unveiled RULO, their new robot vacuum cleaner, in April 2020.

Planetary Exploration Research Center

Looking beyond our world to space
To unravel the mysteries of life

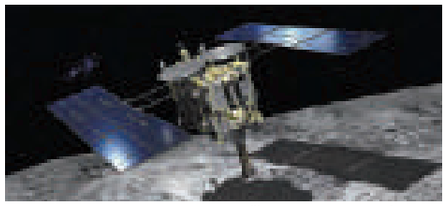
Director of PERC
Tomoko Arai

Through science, mankind has continually pioneered new frontiers of "knowledge." What is life? How did it originate? The cultivation of knowledge to answer these questions was initially an inquiry into what sort of planet the place that we call Earth is. As research advanced and we gained a general understanding of what the Earth is, mankind has sought to focus our efforts less on the physical Earth and more on finding out about the "life" living here. As we entered the 21st century, the scope of this focus on life has extended to space. One of PERC's major research areas is astrobiology, which is the investigation into life's origins and evolutionary processes in the universe.
Although currently we have confirmed the existence of life only on Earth, there are theoretically bound to be many forms of life throughout the universe. Without first attempting to verify this theory, we will never be able to move forward. PERC has developed robots and observational instruments for planetary exploration to investigate the matter comprising planets and asteroids, and we have continued our research into looking for the existence of organic matter and traces of life. PERC is currently also pursuing projects in partnership with the Japan Aerospace Exploration Agency (JAXA), National Aeronautics and Space Administration (NASA), and other organizations leading the way in space development.

Projects

Asteroid Probe Hayabusa2 Getting a closer look at the origin and evolution of our solar system

Japan's asteroid probe Hayabusa2 landed on its target, the asteroid Ryugu, in June 2018. It was on this totally black celestial object 900 meters in diameter that Hayabusa2 finally landed three and a half years and after departing Earth and three orbits around the sun. Right now, we are in the middle of analyzing the collected scientific observations and data. The Hayabusa 2 left the asteroid Ryugu in winter 2019, returning to Earth in winter 2020.
Hayabusa2 follows the original Hayabusa mission which took samples from a small asteroid named Itokawa and returned to Earth in 2010. In fact, we at PERC have been involved in developing nearly all the scientific measuring instruments as well as analyzing the results obtained. In addition to an optical navigation camera that communicated images showing the surprising shape of Ryugu, there is an intermediate infrared camera, near-infrared spectrometer, laser altimeter, deployable camera that captures images of the moment of impact, and other equipment. These devices are utilized as we seek to more closely examine the origin and evolution of Ryugu as well as our solar system.
Visitors to Chiba Institute of Technology's Tokyo Skytree Town® Campus are able to see up close a full-scale model of Hayabusa2.



Illustrated by: Akihiro Ikeshita

Biopause Project: Stratospheric Bioaerosol Sampling Experiment

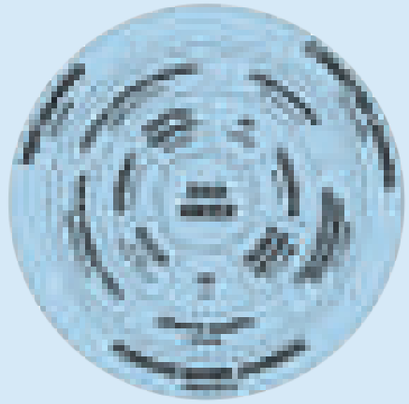
The Biopause Project, which is being conducted principally by PERC, is an investigation of the upper boundary of Earth's biosphere, also known as the biopause. A JAXA scientific balloon flies a microbe sampler to the upper reaches of our atmosphere, which is the stratosphere. We are using scientific observation in an attempt to shed light to determine how high up life is present in Earth's atmosphere. Because there are so few microbes in the stratosphere, a new stratospheric bioaerosol sampler for these balloon experiments was developed so that samples would not be contaminated with terrestrial microbes. With the assistance of CIT's Engineering Center, the sampler was manufactured and taken to JAXA aerospace research field in Taiki town, Hokkaido where the experiments have been conducted. The experiment conducted in 2016 was the world's first ever successful observation of stratospheric microbes and included uncultured microbes.
Enhancing our understanding of our biosphere's upper boundary is an important step in learning whether it is possible for life on Earth to leave and go into space as well as life in space to come to Earth. We are also attempting to find out whether our terrestrial life form is unique to Earth. We believe that this information will provide us with a foundation for considering the Earth's presence in the universe as well as the existence of life and mankind.

Center for Radical Transformation

Going beyond the bounds of existing academic fields to create new intelligence

Director of CRT
Joichi Ito

This is a new technical and academic platform that goes beyond the bounds of specialties to utilize scientific and technological progress for the betterment of society. With researchers from a range of domains across the globe including internet security, religion, artificial intelligence, and Web3 gathering online, we aim to break down barriers between domains, have students studying manufacturing engage in research as one to create new intelligence.



Projects

The first in Japan to offer degree certificates as NFTs

Combining the two technologies of NFTs available to the public with on-chain information and Verifiable Credentials* (VC) that can be shown to or hidden from the public by the student, our NFT degree certificates ensure student privacy. The NFT image only uses text certifying that the bearer is a graduate of the Chiba Institute of Technology, whereas VC includes personal information such as the student's name, degree, subjects, etc. In August 2022, together with PitPa, Inc., we began issuing transcript certificates using blockchain technology, with 1,100 students requesting their diploma in this format in 2023.
Following transcript and degree certificates, efforts are moving forward to shift to NFTs for various certificates that are required in different scenarios. We aim to drive digital transformation (DX) in society overall by helping to promote usage of this technology at other universities and businesses.

※Verifiable Credentials (VC) refers to digital personal information that proves the bearer has certain credentials, skills, etc. Verifiable Credentials are standardized by the W3C international technology standards organization.

Developing an educational program to produce Web3 personnel

Web3 is not just for start-ups, rather, many technology-related companies are now involved. Forecasts show that there will be a shortage of engineers and business leaders in the future, so the Chiba Institute of Technology worked with PitPa, Inc. to develop a specialized Web3 technology educational program. This class, taught by director Joichi Ito and engineers that work with blockchain technology, offers opportunities to learn about the latest technologies.
This is not only for CIT students however, classes are open to a wide variety of learners such as students from other universities who are interested in blockchain technology as well as adults looking for recurrent training and reskilling opportunities to produce diverse personnel.

Program goals

- Produce innovative personnel by providing a practical education program for training Web3 engineers and business leaders.
- Introduce tokens, a voting system, Discord and other tools as well as the Web3 principle of "distributed" thinking, creating an environment where everyone can teach and learn from one another.
- Students that complete this course will not only receive a printed transcript, but also an NFT version which can be used for job hunting.

Software Technology and Artificial Intelligence Research Laboratory

Artificial Intelligence becomes real "intelligence" when it has acquired language on its own

How do human beings acquire language? For researchers working on artificial intelligence and software, this is an extremely important question.
Here at STAIR Lab, we are making full use of the most advanced machine learning theories and software technologies to solve this most challenging of computer problems. None of the issues involved are easy, but this is precisely what makes the research worthy of challenge. Perhaps the day will come when a new "intelligence" born at CIT will be able to stand on its own and communicate with us on an equal footing.

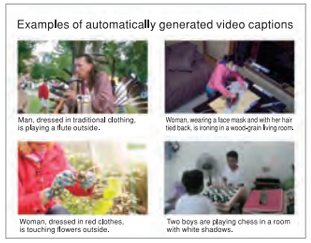
Projects

Hananona: Using AI to learn the names of flowers

AI is able to use large amounts of data to learn intelligently. We developed an AI technology, which we call Hananona meaning "name of flower" in Japanese, to distinguish 406 types of flowers from a large number of flower photos. Hananona was awarded the Good Design Award 2017 and is displayed at the Tokyo Skytree Town® Campus.

AI research on fine-grained action recognition

This project is working to develop AI capable of recognizing and understanding the fine details of human beings' daily movements. The concept is to place a robot in the family home where it observes each and every member, recording where they are and what they are doing. If, for example, someone asks the robot "Where' s mom?" The robot would reply, "She' s in the kitchen cooking."
Since 2016, this project has been supported by the New Energy and Industrial Technology Development Organization (NEDO) and conducted with the cooperation of the National Institute of Advanced Industrial Science and Technology' s Artificial Intelligence Research Center.



Geo-Cosmo Inst. Institute for Geo-Cosmology

Constructing new frameworks of knowledge for a healthy development of civilization

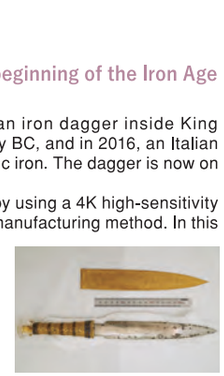
From about 1970, we' ve become more aware of global-scale problems, such as those involving the environment, resources, and energy, which has thrown doubt on the underlying premises of a civilization composed of modern science and technology. Since then, we' ve pointed out the importance of viewing civilization from a broader, systematic perspective, and we' ve proposed the view that civilization is essentially a way of life that creates a new human sphere component within the global system.
Based on this thinking, we have rebuilt the fragmented academic framework and emphasized the importance of building a new knowledge structure for the sound development of civilization. This is the true meaning behind integrating the studies of the arts and sciences, and in that vein, we have launched a new research center known as the Institute for Geo-Cosmology.
CIT' s founding spirit is "Contributing to the world culture with technology." This is also the challenge of Geo-Cosmology. Future technological developments will require us to have the ability to design civilization on our own. This is not something that can be done without the panoramic perspective of Geo-Cosmology. In this sense, CIT is the first Japanese university, which anticipate and address the future coming generation of science and technology .

Project

First in the World

Analyzing the iron dagger of ancient Egyptian pharaoh Tutankhamun to understand the beginning of the Iron Age

In 1922, British archaeologist Howard Carter discovered an iron dagger inside King Tutankhamun' s tomb. The blade was made in the 14th century BC, and in 2016, an Italian research team confirmed that the dagger was made of meteoritic iron. The dagger is now on display in the Egyptian Museum.
The Geo-Cosmo Inst. investigated the well-preserved dagger by using a 4K high-sensitivity camera and an analytical equipment in order to determine the manufacturing method. In this investigation, we conducted the first element distribution analysis of the Tutankhamun' s iron dagger in the world.. The results showed that the meteoritic iron material was heated at the time of manufacture but the temperature might not have been as high as predicted. The research team plans to carry out additional analyses in order to determine the exact temperature during heating.



ORCeNG Ocean Resources Research Center for Next Generation

Engaged in a variety of research and development projects to realize the world' s-first ocean resource development

When money (the blood) flows smoothly through the financial network (the blood vessels), vibrant innovation takes place. But when those arteries get clogged, the economy stagnates. In the medical world, the invention of 3D imaging devices, such as CT, MRI, and PET scanners, has made detailed diagnoses of the internal condition of the human body possible, which has led to dramatic improvements in treatment. At the Global Institute of Financial Research, we devise various ways of coming up with a detailed picture of the internal condition of the economic body and the financial system. One of our main goals is to then distribute this detailed picture in a way that is easy to understand to the general public. We focus on using big-data to develop and propose various indexes and then analyzing and publishing the results.

Project

The challenge seeking out deep-sea frontier resources

Ocean Resource Research Center for Next Generation (ORCeNG) is mainly engaged in surveying the new REY-rich mud resources distributed in the sea area around Minamitorishima Island located in Japan' s exclusive economic zone (EEZ), as well as conducting research with the aim of revealing its origins and establishing technology for its development.

Establishing a method for visualizing wide-area distribution of sea floor resources and calculating that area

We have established a new method for probing that consolidates data from multiple sea floor observations using acoustic waves emitted from a ship to map the distribution of manganese nodules across the broad sea floor, and precisely calculate that area.

RCMC Research Center for Mathematical Engineering

Hinging on mathematical engineering methods such as mathematical modeling, the Institute aims to help solve vital social issues by analyzing, optimizing, controlling, and predicting complex phenomena from around the world.

Faculty of Engineering

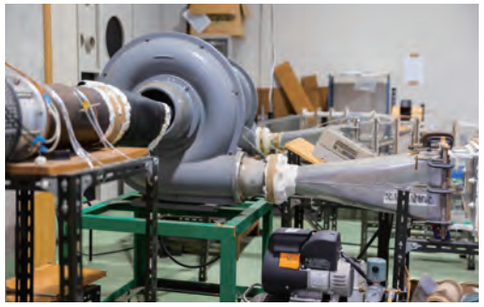
Gaining the knowledge and skills in a variety of engineering fields for the development of modern society

Engineering is a system of intelligence in which various relevant technologies are integrated with scientific knowledge to create innovations that enrich our lives. This system shapes your dreams and ideas into actual products. With a set of knowledge and technical skills, the six departments in our Faculty of Engineering actively support you to relish the pleasure of creation in the field of your interest. By securing practical expertise, you will be able to achieve technological competence to solve challenging problems in modern society and opening a new horizon for the future.

Department of Mechanical Engineering

Prioritizing the study of dynamics to produce mechanical engineers specializing in design

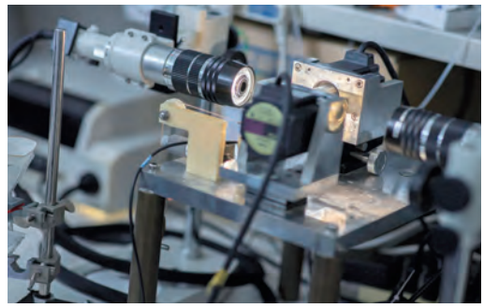
As times change, so do the industries that attract attention, but machines underpin all industries. To create these machines, the four fundamentals of material dynamics, fluid dynamics, thermodynamics, and mechanical dynamics are essential. In addition to these areas, a mechanical engineer's bedrock is his or her skill at drafting, designing, machining, and evaluating. The Department of Mechanical Engineering offers a four-year curriculum that prioritizes the study of dynamics. Through continued practice, students acquire the meticulous skills and abilities necessary for mechanical design. Graduates perform at the top of their field in a variety of industries whether it be transport equipment such as automobiles and railways, power-driven machinery such as engines and pumps, or other precision instruments such as smartphones, watches, and cameras.



Department of Innovative Mechanical and Electronic Engineering

Integrating machinery and computers in the study of technology that makes the impossible possible

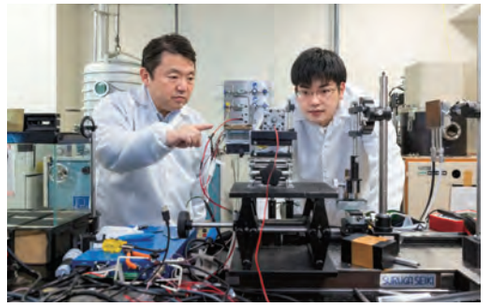
The computer control for automobile brakes that stop a moving vehicle is just one typical example, but we use computers to control microwave ovens, washing machines, and even vacuum cleaning robots so that they operate safely and precisely. The Department of Innovative Mechanical and Electronic Engineering aims to educate engineers proficient in both mechanical and electronic engineering. To that end, we have constructed a curriculum offering comprehensive study of mechanical design, material and fuel development, machining, as well as computer controls. Through labs and other exercises, students learn manufacturing processes and technologies to acquire the skills and abilities that they need to serve as engineers in a wide range of industries including automobile, aircraft, home appliance, industrial robots, assistive and healthcare devices, space development, and so on.



Department of Advanced Materials Science and Engineering

Developing the ability to understand properties of metallic materials and create new materials

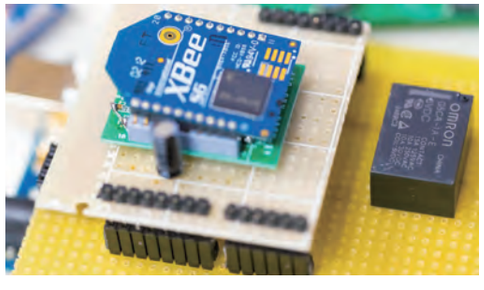
Tokyo Skytree rising 634 m is the tallest structure in Japan. Tokyo Tower, which was completed in 1958, stands 333 meters high. So, it took us just a little over 50 years to develop the technology to realize a structure nearly twice as tall. What made this possible is the variety of new materials, including metal building materials, of the strength that clearly surpasses those used in ordinary steel-frame construction. The Department of Advanced Materials Science and Engineering has contributed to the betterment of people's lives and industry by converting materials found in nature into materials having the properties desired. In this Department, students work to develop new materials as they consider manufacturing processes while, at the same time, weighting the costs and environmental footprint mainly of metal materials widely used everything from buildings to automobiles, home appliances, electronic devices, and even kitchenware.



Department of Electrical and Electronic Engineering

Controlling electricity and electrons to create a comfortable and sustainable society

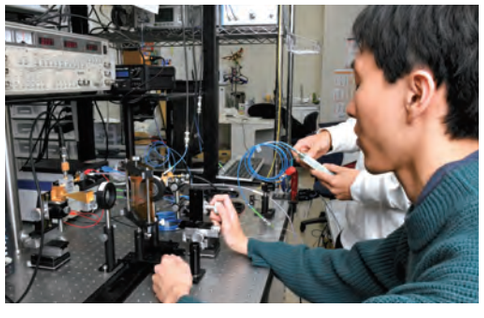
When we think about items that use electricity and electrons, we envision lights, televisions, refrigerators and other electrical devices, communication devices such as personal computers and smartphones, as well as transportation systems such as railways and automobiles, but the list is endless and will undoubtedly expand even more in the future. In the Department of Electrical and Electronic Engineering, students study about the behavior of electricity which is the power source moving objects and electrons responsible for information communication and control. They also work to develop control systems for efficiently and safely utilizing both electricity and electrons. An advantage of this field of study is that it covers a wide range of specializations, including high-voltage electricity, light, sound, magnetism, energy, and so on. Graduates are able to make use of the knowledge and skills they learn and apply them to the automobile, railway, electronic device, as well as civil engineering and construction industries.



Department of Information and Communication Systems Engineering

Learning both the tangible and intangible aspects of information communication theory and technology

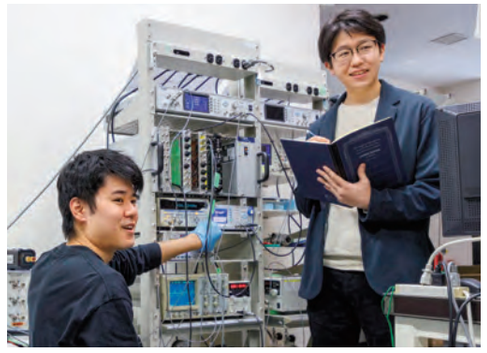
What sort of mechanisms connect smartphones and the internet, both of which we use as a matter of course every day? Base stations and servers are connected to hundreds of computers and communicate using a set of complex rules. To understand these mechanisms, one must first engage in an integrated study of information communication theory and technology. The Department of Information and Communication Systems Engineering offers an environment where students study antennas, circuits and other hardware, the rules for protocols and packets upon which communication is based, as well as networks, applications and other software in our commitment to develop the information and communication system engineers required to lead the next generation.

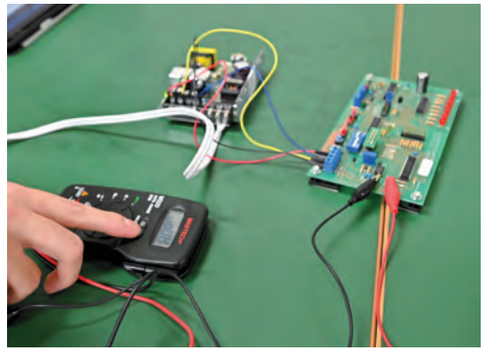


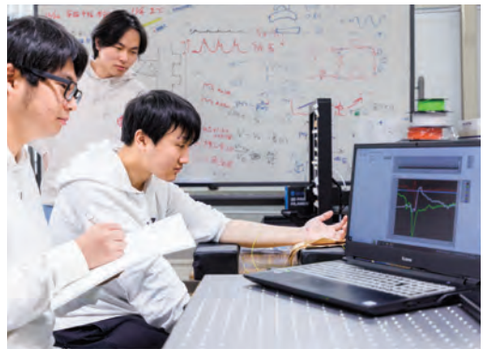
Department of Applied Chemistry

Exploring the world of chemical elements and learning the process of material development

There are 118 known elements on Earth and these combinations are infinite. Applied chemistry is the design of element combinations to develop new functional materials. It is a useful field not only for our lives, but industry as well. The Department of Applied Chemistry seeks to improve manufacturing processes and products for foodstuffs, healthcare, aerospace, automobiles, electronic devices, and other areas. With a view toward contributing to society, the Department has also focused its energy on recyclable materials reducing our environmental footprint as well as biomaterials for medical treatment. Just in this field alone, new materials, such as carbon nanotubes and bioplastics, are being constantly created. Starting their first year, students take courses that incorporate lab work in order to acquire the practical skills to produce materials on their own.







Faculty of Creative Engineering

Looking at people's lives to create a more comfortable living environment

We deal with things ranging from those small enough to hold or smaller to those that can only be viewed from space. We also deal with things that can't even be held or touched. Our work is characterized by the fact that we often manufacture and create things under limited conditions and in settings that change every day. we need to create by relying on our techniques, knowledge, and experience in ways that depend on the situation. We need the ability to fight our way through various situations. The Faculty of Creative Engineering encourages motivated and hardworking students to acquire not only high-level specialist knowledge but also familiarity with various fields and the ability to apply their skills flexibly.

Department of Architecture

Acquiring the knowledge necessary for creating architecture in harmony with man, culture, and the environment

To create structures that support people's livelihood and are designed with the environment in mind, the architect is required to possess total knowledge ranging from planning and designing to structures, materials, environment, and equipment. The Department of Architecture educates students so that they will possess an understanding of both design and engineering. The curriculum is arranged so that a variety of interrelated specialized subjects are organically structured around a core series of design courses and supplemented with seminars in structural, materials, environmental and facility engineering. Students participate in group work where they determine who is responsible for the respective steps of design, structure, facilities, and so on, and cooperate with each other to produce their work, thereby enhancing their communication and presentation skills.

Department of Civil and Environmental Engineering

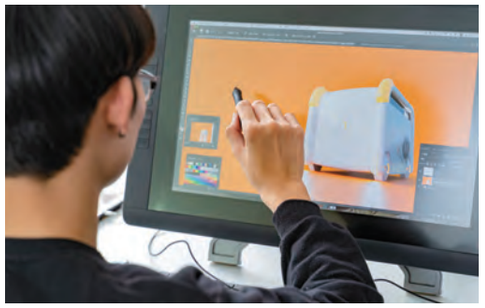
Educating professionals possessing expertise in infrastructure building, urban planning, and environmental conservation

As our climate changes, so does the risk of a natural disaster or massive earthquake increase. This has made the construction of our social infrastructure even more important. The people required to perform these tasks not only have the skills to build roads, bridges, parks, water supply and sewage systems, and the other infrastructure that make up our urban areas, but also maintain a broad knowledge of measures for countering floods, earthquakes, and other natural disasters as well as environmental conservation. They must also be able to contribute to improving the urban environment. So that we may educate and develop people able to meet these needs, the Department of Civil and Environmental Engineering has set up a curriculum where students study not just traditional civil engineering fields, but also urban engineering and planning and learn about environmental studies from a physical point of view. We develop professionals capable of creating comfortable environmentally-friendly towns as they sketch out a vision for the future of our cities.

Department of Design

Learning design techniques that achieve both functionality and design excellence

Design is not something that only people with an extraordinary sensibility or ability to express concepts are able to produce. In the Department of Design, students refine their design competency acquired through a process of researching usability and other aspects of user psychology, producing samples based upon their knowledge of materials, structures and other engineering fields, and constantly improving upon what they produce. The Department offers a wide variety of practical courses and, in partnership with companies and local governments as well as other collaborations, students are challenged to produce items for daily and industrial use. Moreover, they are also able to acquire design competency that may be applied to a range of fields including advertising, media content, and spatial design of shopping districts and tourist destinations.



Faculty of Advanced Engineering

Breaking new ground in future technologies with ideas

The Faculty of Advanced Engineering has constructed a curriculum that enables students to master the basic knowledge and concepts as well as understand the essential elements of advanced science and technology so that they may and acquire the competency to pioneer their respective fields and flexibly to handle future developments. The faculty's research seeks to bring greater convenience to our lives, something for which there is great demand in society. The Faculty of Advanced Engineering continues to evolve as it strives to create a future society in which robots are conveniently used, good health maintained with effective medicines, and information managed as if it may be grasped right before one's eyes.

Department of Advanced Robotics

Comprehensively learning the mechanical, electric, electronic and information engineering necessary for robotics

When people hear the word robot, they tend to imagine a humanoid robot, but society uses robots that come in a variety of configurations and sizes. For instance, automatic coffee makers and automated doors and elevators are also the types of robots as are self-driving automobiles, an evolution that is just about ready for practical application. These kinds of robots are manufactured with mechanical, electrical, electronic and information engineering technologies. In the Department of Advanced Robotics, students begin building robots in their first year. They receive a comprehensive education providing them with an excellent engineering foundation in design, circuitry, programming and control. Having acquired the knowledge and technical competence to realize ideas that people only wish for, our graduates are successful in a variety of fields.

Department of Life Science

Aiming to educate engineers who understand the mechanisms of life and able to contribute to the bio-industry

Life science has unraveled very elaborate mechanisms maintaining life itself and improved people's livelihood through the development of pharmaceuticals, food products, cosmetics and other items with a wide range of effects and efficacies. The Department of Life Science offer students the opportunity to observe life at the genetic and cellular level as well as the challenge to understand and manifest new life phenomena. In addition, students are also able to concentrate their energies on the rapidly-growing field of biopharmaceuticals. In addition to drug development, students learn about post-development manufacturing, quality control and other process management facets as we aim to imbue in them the skills required for the real world.

Department of Advanced Media

Fusing media engineering, knowledge engineering and information design to foster creativity

The evolution of technology to 4K and 8K television has brought us realistic images and sounds in sports and other broadcasts. Technology from the field of media engineering is used to produce these realistic sounds and images. Moreover, by offering an interdisciplinary learning experience that comprises the three fields of media engineering, knowledge engineering as typified by artificial intelligence as well as other types of intelligences integrating knowledge into computers to solve advanced problems, and information design realizing more user-friendly interfaces, our aim is to develop students capable of creating entirely new systems never seen before. The Department offers great reward and satisfaction to people who want to elucidate the unknown and take up new challenges.

Faculty of Innovative Information Science

A dual hardware and software approach

We take a dual-sided approach with hardware and software as foundational and applied technologies for computer science which support a cutting-edge cyber and physical society, helping train personnel that can design and develop information and communication technologies (ICT) in a world that is constantly changing.

Department of Computer Science

Learning about hardware and software as a system and developing comprehensive abilities

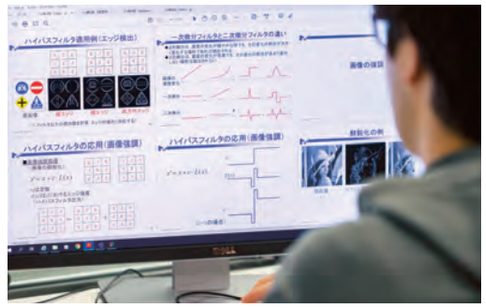
The core meaning of computer science, which is the name of the department, is the automation of all things. There are many things all around us that are the result of computer science. Take tablet computers, for example. They are made possible thanks to media technology such as speech acquisition, communication technologies such as 5G, and the computational technologies that control them.

This department aims to skillfully combine these elements so that we can train engineers who will lead the world using computer science technologies.

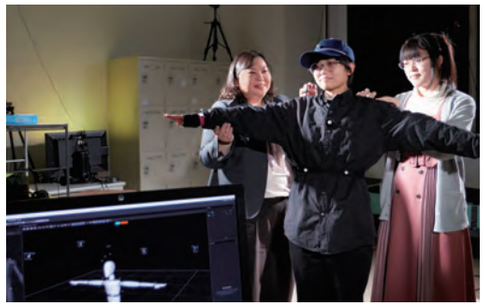
Department of Cognitive and Information Sciences

Learning about humans to create new information technologies

It goes without saying, but to make information devices we use such as computers and smartphones more useful, we need to learn more about humans. The branch of academia for such studies is cognitive science. We explain what organs humans use to gather information from the outside world, how it is processed, how it is output, and how sensory perception and thinking work using scientific and psychological methods. The goal of this department is to gain such knowledge while learning about modern information technology such as AI and XR so that we can produce more human-friendly information technology.



Department of Applied Informatics



Groundbreaking inspiration from a broad knowledge base

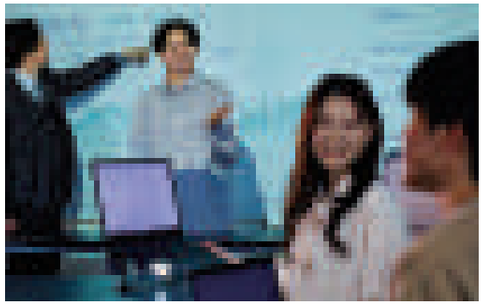
We no longer live in an age where information engineers such as systems engineers and programmers can get by with IT knowledge alone. For example, knowledge outside of specialized domains helps bring about novel ideas in many cases that facilitate in resolving problems and developing new services. In addition to fundamental information technology, this department offers students the chance to learn about a wide range of cross-cutting disciplines such as data science, cybersecurity, machine learning, IoT, finance, production, and transportation. We aim to help students learn information technology methods and discover and develop new avenues of application.

Faculty of Innovative Management Science

Seeking to solve business issues with the abilities grounded in science and engineering

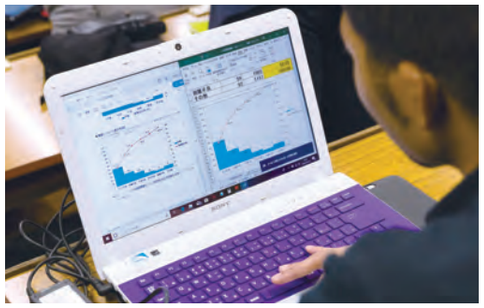
In the fields of management engineering and social design, which require complex mathematical thinking and data science skills in order to transform the structure of society with information processing technology, we train students to develop practical and adaptable skills for organically using essential information processing technology and for promoting DX.

Department of Digital Transformation



Training engineers that can reform organizations and management strategies

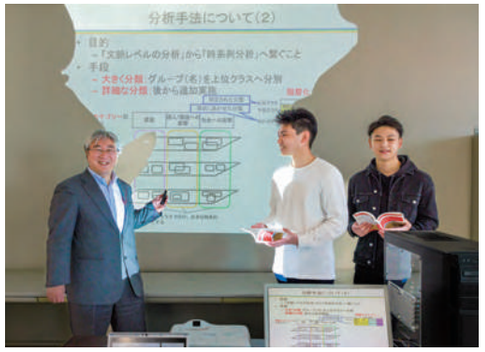
In a world incorporating DX, rather than simply streamlining work with IT, dramatic social transformation is under way that is changing the underlying structure of organizations and business itself thanks to digital technology. This department aims to train the next generation of personnel in charge of DX. To do so, a bird's-eye-view that shows the entire organization and business is essential. With that in mind, students learn about operations, project management, finance, and cybersecurity, which supports these areas in the background.



Department of Business System Design and Management

Creating personnel that can manage business with the future in view.

This department aims to train the next generation of personnel in charge of DX. To do so, a bird's-eye-view that shows the entire organization and business is essential. In addition to the three areas of management engineering, information technology, and system-based thinking, students learn about environmental symbiosis (SDGs, energy, etc.), all of which form the base of business activities that fulfill social responsibilities, acquiring advanced management skills to create next-generation businesses. Additionally, project based learning (PBL) seminars taking on actual corporate management problems to foster practical skills are conducted each semester from years one to four.



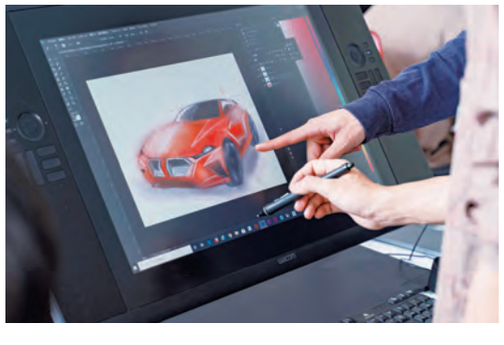
Graduate School

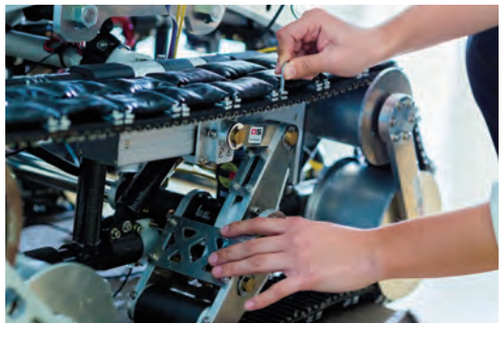
CIT's graduate schools aim to contribute to cultural progress based on the undergraduate programs and providing more extensive and in-depth study and research into engineering theories and applications.

Graduate school programs

Graduate School of Engineering	Master's Program in Mechanical Engineering
	Master's Program in Innovative Mechanical and Electronic Engineering
	Master's Program in Advanced Materials Science and Engineering
	Master's Program in Electrical and Electronic Engineering
	Master's Program in Information and Communication Systems Engineering
	Master's Program in Applied Chemistry
	Doctoral Program in Engineering
Graduate School of Creative Engineering	Master's Program in Architecture
	Master's Program in Civil and Environmental Engineering
	Master's Program in Design
Graduate School of Advanced Engineering	Master's Program in Advanced Robotics
	Master's Program in Life Science
	Master's Program in Advanced Media
Graduate School of Information and Computer Science	Master's Program and Doctoral Program in Information and Computer Science
Graduate School of Social Systems Science	Master's Program and Doctoral Program in Management Science

※ The Graduate School of Creative Engineering and Graduate School of Advanced Engineering doctoral programs connect to the Department of Engineering at the Graduate School of Engineering.





Graduate School of Engineering

The Graduate School of Engineering provides students with the opportunity to learn and acquire a variety of specialized knowledge and skills at a high level in engineering fields that include mechanical engineering, electronic engineering, information and communication systems, applied chemistry, and so on. Furthermore, our aim is to provide our students with a well-rounded education necessary for highly specialized engineers, the ability to take the initiative, use examples to explain their own ideas logically, communicate to facilitate teambuilding, in addition to various other capabilities and competencies not limited to scholarship. We guide them to develop to be professionals capable of utilizing technology to contribute to global culture and the engineering field.

Master's Program in Mechanical Engineering

Students acquire extensive specialized knowledge through a broad study of mechanical engineering that encompasses material dynamics, mechanical dynamics, thermodynamics, fluid dynamics, machining, design and other subjects. Moreover, as students pursue lab exercises and research activities, they develop the ability to put knowledge into practice as well as high-level manufacturing craftsmanship competency and problem-solving ability. The program produces the outstanding specialized engineers that society requires and who are able to seek out social issues and take the initiative to find solutions in a free-thinking manner not bound by simply an engineering perspective.

Master's Program in Innovative Mechanical and Electronic Engineering

From a basis of fundamental mathematical and physics knowledge, students acquire broad high-level knowledge of mechanical engineering as well as electrical and electronic engineering. Moreover, the practical labs and research activities that students conduct help them in acquiring practical skills so that they may improve their capabilities to be able to create advanced engineering products. We train advanced engineers to embody them with initiative and cooperativeness and to possess the comprehensive capability, which requires knowledge of both mechanical engineering as well as electrical and electronic engineering, in order for them to formulate ideas for innovative engineering products and then implement those ideas through planning, design and production.

Master's Program in Advanced Materials Science and Engineering

Students acquire high-level specialized knowledge about material engineering pertaining to a range of structural materials, functional materials, and other areas, and they research the development of new materials as well as rethink the ways in which existing materials are used. In addition, students are engaged in practical lab work and research activities that enable them to acquire competency in manufacturing craftsmanship as well as problem-solving abilities. Students are educated to become highly specialized engineers capable of wielding their flexible thinking and capability to detect problems and then manufacture and manage high-quality materials as well as develop advanced materials in a range of industrial fields.

Master's Program in Electrical and Electronic Engineering

The high-level study of specialized knowledge and skills relating to electrical and electronic engineering produce master engineers having both advanced expertise and skills. Moreover, as students pursue research activities and lab exercises that emphasize the practical, they develop into engineers capable of utilizing their exceptional specialized knowledge to support a variety of technologies such as electrical energy-related technologies, power conversion-related technologies, electronic materials and sensor-related technologies, measurement and control technologies, as well as other technologies that make up the foundation of an energy-conserving and advanced information-oriented society.

Master's Program in Information and Communication Systems Engineering

From a basic knowledge of mathematics, physics, and electric circuit design, students acquire specialized knowledge, engage in practical lab work as well as research activities to enhance their expertise. Moreover, one aim of the program is to improve students' ability to think logically to convey their thoughts in an easy-to-understand manner as they present the basis for their ideas and maintain the capability to respond flexibly while understanding their own roles and engaging in appropriate communication within their teams. We seek to educate engineers with the capability to demonstrate high-level competencies in engineering fields ranging from hardware to software for constructing information communication systems.

Master's Program in Applied Chemistry

Students learn knowledge and skills in a wide variety of specialized fields at an advanced level, including organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, and other fields, and they acquire creative and problem-solving competencies through practical lab work and research activities. Moreover, the program seeks to develop advanced specialized engineers capable of wielding high-level expertise and skills so as to form the practical skills and creativity to create new substances, manage the quality of a variety of substances, and design materials.

Doctoral Program in Engineering

The doctoral program has been established for students who have a master's degree, anticipate receiving one shortly, or are professionals with equivalent achievements and experience. The aim of this program is to train researchers and senior engineers maintaining advanced specialization and a broad perspective with the capability to flexibly address a range of issues that modern society faces from a global perspective. With the goal of developing such professionals, the program is comprised of research areas that allow the candidate to contribute to the development of science and technology today while taking into consideration of continuity with the CIT's Graduate School of Engineering Master's Program across a range of specialized fields. The purpose of the program is to develop young researchers and senior engineers that have the insight, creativity, and ability to perform and employ foresight to provide rational solutions within an environment outfitted with a full complement of research facilities and working together with faculty members who possess a wealth of experience and have engaged in advanced activities in Japan as well as overseas.

Graduate School of Creative Engineering

※ The Graduate School of Creative Engineering and Graduate School of Advanced Engineering doctoral programs connect to the Department of Engineering at the Graduate School of Engineering.

The Graduate School of Creative Engineering provides students with the opportunity to learn and acquire at a high-level the specialized knowledge and skills in the field of urban environmental engineering, which is a combination of all areas of architecture and design. In addition, the program seeks to educate professionals so that they maintain the ethical perspective and social responsibility of advanced specialized engineers and acquire the communicative ability and creativity as well as logical thinking and other knowledge aspects necessary for deducing solutions to problems, putting forth plans and proposals, and translating these into execution. During the two-year program, students acquire greater practical presentation and teambuilding skills that are put to use in the production process.

Master's Program in Architecture

From a basis in architecture and architectural engineering that is supported by fundamental knowledge about creative engineering, students acquire even greater specialized knowledge through their study of various architectural fields as well as practical architectural and design methods. Furthermore, students gain practical skills as they create designs and give presentations in conjunction with their research. The program seeks to educate advanced engineers capable of being creative and taking the initiative to find solutions to global environmental problems as well as other issues facing the international community, which undergoes continuous change due to economic globalization and other trends.

Master's Program in Civil and Environmental Engineering

Through the study of natural sciences, social sciences and other fields related to urban environmental engineering, students acquire greater specialized knowledge. As they pursue laboratory work and research activities that utilize knowledge gained, students develop advanced capability to take the initiative in finding problems with public infrastructure or other components necessary for people's lives, then comprehensively and creatively utilize design and the urban environment to provide solutions to such issues through planning, designing, constructing as well as managing and maintaining various structures, which comprise our social infrastructure including urban facilities, environmental conservation facilities, and transportation facilities.

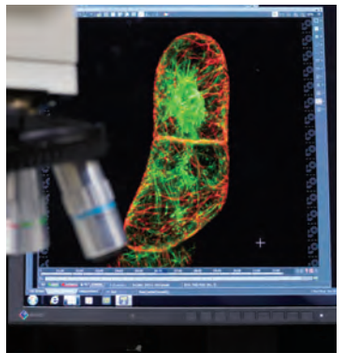
Master's Program in Design

Through the systematic study of a variety of scientific methods for fostering the ability to act, ability to think and creating new things and mechanisms as well as digital fabrication and prototyping to realize ideas, students acquire more specialized knowledge. As they pursue fieldwork, lab work and research activities that put these concepts into practice, students develop the practical competencies of a designer embodied with a wealth of wisdom, technical capabilities, and creativity to foster the ability to act, ability to think as well as create mechanisms for independently finding issues and resolving them from within actual life and society.

Graduate School of Advanced Engineering

※ The Graduate School of Creative Engineering and Graduate School of Advanced Engineering doctoral programs connect to the Department of Engineering at the Graduate School of Engineering.

In the Graduate School of Advanced Engineering, students engage in research where they make use of comprehensive specialized knowledge and skills at an advanced level while maintaining a broad perspective to derive new solutions and adapt to changes in the times such as globalization and progress in science and technology, including in the fields of robotics where they conduct on intelligent machines, life sciences including biotechnology, as well as intelligent media such as AI which holds keys to our future. The two-year program is built on knowledge of fundamental engineering areas, ethics that highly specialized engineers should maintain, and an understanding of their social responsibility. The program is designed to enable students to become more proficient in logical thinking, presentation, and other skills so that they will be able to take the initiative to put those elements into action.



Master's Program in Advanced Robotics

In conjunction with proficient knowledge and skills in the fundamental engineering fields of mechanical, electric and electronic, information, and control, students master approaches for applying these competencies in an integrated manner as well as techniques of practical mechanical design, electric and electronic circuit design, programming, and control system design, and, in the process, acquire a more profound understanding of the principles of robotics. Moreover, through practical lab works and research activities, we seek to educate professionals possessing the competence to wield advanced specialized knowledge relating to control technologies and artificial intelligence, which may potentially enhance the convenience of human life.

Master's Program in Life Science

Graduates of the Master's Program in Life Science will possess advanced specialized knowledge that is founded upon a fundamental knowledge of life science and related fields as well as the competence to apply this knowledge from multiple life science-related perspectives. The master's program develops in students the ability to drive research and development demanded by society. In addition, we educate advanced engineers who will be competent in leveraging research and development on biotechnologies, such as embryonic stem cells and induced pluripotent stem cells, to find solutions to issues within the parameters of bioethical constraints through creative design and systematic high-quality problem-solving ability.

Master's Program in Advanced Media

The Master's Program in Advanced Media provides students with a more profound knowledge of media engineering, network data engineering, and information design, and enables them to acquire advanced specialized knowledge, skills and abilities. Along with the ability to collaborate with others to facilitate group work, students acquire the capability to plan and develop comprehensive high-quality intelligent media engineering systems. We educate and develop advanced engineers possessing the capability to integrally apply such aspects and serve as design engineers ascertaining the needs of society and their clients across the entire manufacturing process.

Graduate School of Information and Computer Science

The Graduate School of Information and Computer Science offers education and research opportunities to further enhance expertise in information science for an increasingly globalized and information-oriented society. The school's master's program is designed to produce engineers and researchers with highly professional expertise that is useful in the industrial world, not limited to the information-processing arena of business. The doctoral program is designed to produce researchers who have the most advanced knowledge and skills in information science and are able to be leaders in pursuing pioneering academic research.

Master's Program and Doctoral Program in Information and Computer Science

The program comprises four fields, artificial intelligence engineering, information system engineering, information network engineering, and media information science. In the program, we provide opportunities for education and research concerning the leading-edge ICT technologies and their applications. In order to meet the demands of globalization and an advanced information society that continues to evolve rapidly, we aim to foster highly skilled information processing and system engineers, network engineers and media processing engineers who can play active roles not only in information processing industries, but in a wide range of other industries as well. Besides training advanced engineers with the inquisitive mind and problem solving skills in various fields, we also place strong emphasis on fostering co-production and communication skills.

Graduate School of Social Systems Science

The Graduate School of Social Systems Science offers education and research opportunities in a management engineering methodology for a wide variety of systems covering everything from business management to social economy. The master's program produces professional engineers and researchers with an advanced level of management abilities to cope with systems that are increasingly complicated and diversified. The doctoral program produces researchers who have highly professional expertise in management and social systems and can build a new systematization of knowledge in the areas in which they specialize.

Master's Program and Doctoral Program in Management Science

Management Science offers an academic framework for the development of science and engineering methodologies for the management of organizations. At the same time, it represents a body of knowledge on science and technology for the analysis, design, and operation of various management systems. The program comprises four research fields addressing diverse systems from business management to social economy; Social and Economic Systems, Management Information Systems, Project Management, and Risk Management. The course offers education and research providing wide-ranging specialist knowledge concerning management methodologies and theories from a science and engineering viewpoint. The master's course fosters advanced specialist engineers and researchers who can meet the challenges of increasingly complex and diverse social systems in times of turbulent change. In addition, the doctoral program builds on the master's course to develop people who can cope with advanced research tasks in the field of social systems from an engineering standpoint.

International Exchange

As of March 1, 2023, we not only engage in researcher and student exchange with 42 universities in 19 countries and regions, and send and welcome groups of observers, but we also support student and faculty activities overseas, helping train personnel capable of working internationally.

Student Exchange

This is a program mainly for graduate students, offering them the chance to study abroad at partner schools in Europe, the Americas, and Asia from one month to one year where they engage specialized research related to their field of study. Scholarships (with no obligation to repay) are also offered to excellent students who have decided to study abroad and meet certain conditions.

Overseas Training Program (Past Efforts)

Language students have gone to train at the University of California, Irvine (U.S.), the University of Guam (U.S.), and the National Taipei University of Technology (Taiwan). Overseas internships at IT and other companies are also available at FPT University (Vietnam).

Academic and student exchange partners

U.S.A.	College of Engineering, The Pennsylvania State University
	University of Colorado Boulder
	Tennessee Technological University
	Missouri University of Science and Technology
	University of Alabama in Huntsville
	University of Guam
	DePauw University
Canada	Faculty of Applied Science and Engineering, University of Toronto
	Faculty of Applied Science, The University of British Columbia
Mexico	Instituto Tecnológico de Aguascalientes
	Universidad Tecnologica de Tecamachalco
United Kingdom	King's College London
France	Université de Technologie de Compiègne
Germany	Ruhr-Universität Bochum
Sweden	Royal Institute of Technology
	Faculty of Engineering, Lund University
Egypt	Egypt-Japan University of Science and Technology
Rwanda	University of Rwanda
China	Harbin Institute of Technology
	Jilin University
	Beijing Institute of Technology
	University of Saint Joseph

Taiwan	National Taipei University of Technology
	Tunghai University
	College of Engineering, National Taiwan University
	College of Planning and Design, National Cheng Kung University
Thailand	Thai-Nichi Institute of Technology
	Faculty of Pharmaceutical Sciences, Chulalongkorn University Faculty of Engineering, Chulalongkorn University
Malaysia	Universiti Sains Malaysia
Vietnam	VNU University of Engineering and Technology
	VNU University of Languages and International Studies
	Hanoi University of Science and Technology
	FPT University
	Thai Nguyen University
	Foreign Trade University
India	Amity University
Indonesia	Institut Teknologi Bandung
Cambodia	Royal University of Phnom Penh
Mongolia	Institute of Engineering and Technology
	Mongolian University of Science and Technology
	National University of Mongolia
Philippines	University of the Philippines Los Baños

Career Support

CIT provides a variety of career development supports to individual students, from enrollment through to employment or further education and their future vision. Academic and career counseling provides students with an opportunity to think about their ideal path, by exploring their career awareness and intentions. We provide advice to enable students to perform objective self-analysis of their job intentions, character, qualifications and skills. After careful consideration of the outcome of self-analysis and other conditions, we provide information and advice to enable students to narrow down the industry, companies and positions that they should aim for.

We also gather basic information about prospective employers, host visits and seminars from alumni who have joined the workforce, and provide information for briefings. We advise students how to fill in application forms, how to approach written exams, and how to prepare for interviews, providing guidance tailored to the needs of each student. In addition, we offer intramural company briefings and joint company seminars, regional job-hunting support, and a wide range of other events and seminars to meet the needs of individual students from their first year.

Support Associations

Alumni Association

The Alumni Association is headquartered on the Tsudanuma Campus. It has a proud history of over 75 years with approximately 96,000 alumni active nationwide. The Alumni Association's main activities include extensive support for undergraduate and graduate students by introducing alumni working at companies, arrangements for holding clubs and extracurricular activity alumni gatherings, as well as providing alumni information about research labs.

In addition, the Alumni Association has assigned directors to coordinate the 50 local chapters as well as 9 corporate and workplace chapters (Chiba Prefectural Government Office, Chiba City Hall, Chiba Prefecture School Teachers and Staff, Hitachi, Ltd., Isuzu Motors Limited, Hino Motors, Ltd., etc.) nationwide, and these organizations serve as a bridge connecting graduates and current students.

In addition to holding gatherings for students from the same prefecture, the Alumni Association supports student internships as well as job placement for those returning to their hometown. In addition, there is also assistance offered in conjunction with Chiba Institute of Technology in the form of grants to graduate students to subsidize travel expenses for conference presentations.

Industry, Government and Academia Collaboration Council

The Industry, Government and Academia Collaboration Council has developed continuously since its establishment in 1991 as the Technology and Information Promotion. It has led information exchanges with industry and public institutions concerning education and research, technology and employment, promoting understanding and friendship. The Council in its current form was inaugurated in 2013 with the aim of contributing to industry, the regional community and the development of CIT. Executives selected from the Center for Industry, Government and Academia Collaboration organized by the President and from the Industry, Government and Academia Collaboration Council form an executive committee to draft business plans. By publicizing these activities widely, we promote joint research with industry and funded research as well as education and research, thereby fulfilling CIT's mission of contributing to society. We will continue to promote the activities of the Industry, Government, and Academia Collaboration Council.

Parents and Professors Association (PPA)

PPA is comprised of parents, professors for the purpose of providing assistance to improve and develop education and research, hold get-togethers for members, as well as promote the welfare of students and professors. In conjunction with the Alumni Association, parents and professors meet in 40 communities nationwide. PPA offers individual consultations for parents and professors and shares information about student life, scholarship, and local job opportunities in its effort to support students in a variety of ways. In addition, PPA also offers assistance to cover expenses for educational programs and PPA's recreational facilities.

Training Center

Onjuku Training Center

Located in a nature-rich environment close to the Pacific Ocean, the Center is carefully designed to provide opportunities for students to meet and enjoy learning.

CHÂTERAISÉ HOTEL Nirasaki no Mori

This research facility is nestled in the abundant natural surroundings of the Kai mountains. It is available for various laboratory seminars and club camps.

ACCESS

Tsudanuma Campus

2-17-1 Tsudanuma, Narashino, Chiba 275-0016, JAPAN
Phone : +81-(0)47-475-2111

- JR Sobu Line :
  In front of the South Gate of Tsudanuma Station
- Keisei Line :
  10-minute walk from Keisei Tsudanuma Station
- Shin Keisei Line :
  Three-minute walk from Shin-Tsudanuma Station

Shin-Narashino Campus
Akanehama Athletic Facilities Soho Dormitory-Tsubaki Dormitory

2-1-1 Shibazono, Narashino, Chiba 275-0023, JAPAN
Phone : +81-(0)47-454-9754

- JR Keiyo Line :
  Six-minute walk from the South Gate of Shin-Narashino Station
- JR Sobu Line :
  Take the Keisei bus bound for Shin-Narashino Station from the bus terminal at the South Gate of Tsudanuma Station to go to Chiba Kogyo Daigaku Iriguchi (15-minute ride), and then a three-minute walk.

Tokyo Skytree Town® Campus

8F Solamachi, Tokyo Skytree Town,
1-1-2 Oshiage, Sumida-ku, Tokyo 131-0045, JAPAN
Phone : +81-(0)3-6658-5888

- Oshiage (SKYTREE) Station :
  Take the TOBU SKYTREE Line,
  Tokyo Metro Hanzomon Line,
  Toei Asakusa Line, or Keisei Oshiage Line