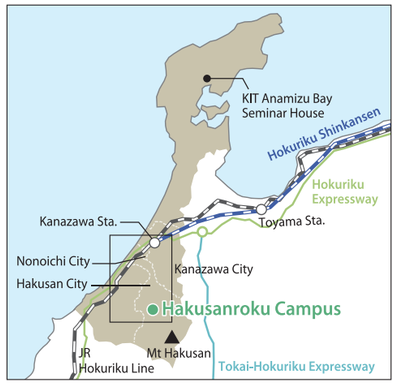
Access



By Train (to Kanazawa Sta.)

From Tokyo	about 2hours 30minutes
From Omiya	about 2hours 5minutes
From Takasaki	about 2hours
From Nagano	about 1hour 5minutes
From Osaka	about 2hours 35minutes
From Nagoya	about 2hours 30minutes

By Air (to Komatsu Airport)

From Sapporo	1 flight per day	95minutes
From Sendai	2 flights per day	65minutes
From Haneda	10 flights per day	60minutes
From Narita	1 flight per day	75minutes
From Fukuoka	4 flights per day	80minutes
From Naha	1 flight per day	130minutes

There are international flights from Taipei, Shanghai, and Seoul.
Please check Komatsu Airport's website for details.

International Collage of Technology, Kanazawa

TEL. 076 -248 -1080 2-270 Hisayasu, Kanazawa, Ishikawa 921-8601 Japan

ICT Kanazawa

Admissions Center TEL. 076-248-9840 Email admissions @ ict-kanazawa.ac.jp

Feel free to contact our Tokyo Toranomon Campus as well.
Atago Toyo Bldg. 12F 1-3-4 Atago, Minato-ku, Tokyo 105-0002 Japan TEL. 03-5777-2243

KIT | ICT

2018.6

ICT | International College of Technology Kanazawa

International College of Technology

School Guide 2019

Let's learn together to create new things for the world.

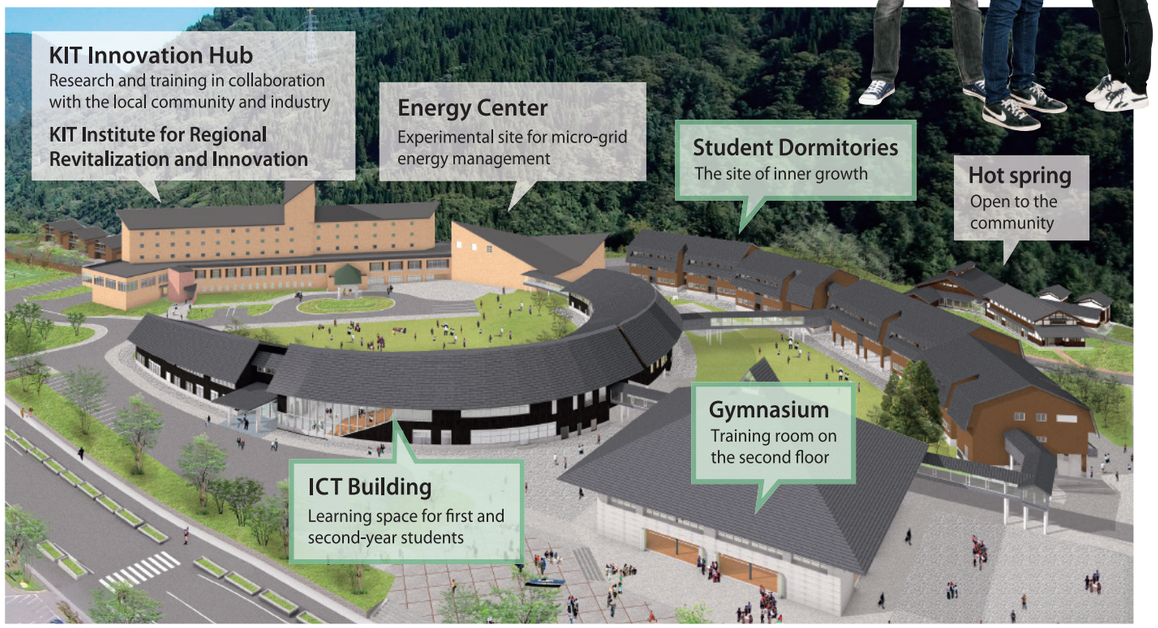
Create new things for the future

Opened 2018

Hakusanroku Campus

1st 2nd year
Fully residential
boarding school

At Hakusanroku Campus, where first- and second-year students study, Kanazawa Institute of Technology (KIT) and International College of Technology (ICT) carry out society-based education in collaboration with the local community and industry. There are KIT research centers on campus where students can expand their innovative thinking by conducting advanced research using AI, big data, and robots.




Public Square


Gym


Courtyard


Main Building

ICT Building and Dormitories

The school building harmonizes with its natural setting and encourages lively interaction to forge a new learning community.

Communication with nature

Living Commons

In the project booths students can immediately make prototypes in order to evaluate their designs with their classmates.

Maker Studio

A creative environment for learning

Computer Lab

Laboratory

Place for learning and lively interaction with fellow learners

Library and Work Commons

Dormitory

Each dormitory is divided into six-person living units. Six first and second-year students reside in each unit and learn to collaborate effectively in a healthy atmosphere with people of various backgrounds.

Golden Eagle Cafeteria

Breakfast, lunch, dinner, and light snacks are served here by Cezars' Kitchen (Nagoya), provider of meal services to many international schools. There is also a kiosk where students can buy stationery and everyday necessities.

ICT's One-of-a-kind Education

Students collaborate in teams to use the knowledge and techniques they learn in the classroom to realize innovative solutions

Engineering Design

CDIO & Design Thinking

ICT is a member of the CDIO Initiative, an international consortium of institutions of higher learning to promote best practices in engineering education, balancing engineering science, engineering practice, and engineering in the context of society and industry. CDIO stands for "Conceive", "Design", "Implement", and "Operate," the key phases of engineering practice. ICT was the first school in Japan to join the CDIO Initiative, which today includes more than 100 institutions around the world, including MIT and Stanford University.
In "Engineering Design", students tackle problem-solving activities using "Design Thinking", a set of approaches to create value using input from a user's perspective.

Department of Science and Technology
Professor Omihito Matsushita, Chair

"Engineering Design" is the core of the ICT curriculum. Students use design thinking to solve open-ended problems in teams. They deepen their understanding of the user's point of view to generate solutions while gaining "monozukuri" skills, IT skills, and insight into the complex ethical issues involved in science and engineering within society and the environment.
Don't be afraid to make mistakes. Let's take on challenges together to learn and create.

Example of Design Thinking

CDIO

Conceive → Design → Implement → Operate

Learning Express

Students homestay in local communities in Southeast Asia and work in teams with students from other countries to identify and solve local problems.

Insight · Observation · Empathy
Study the user's needs

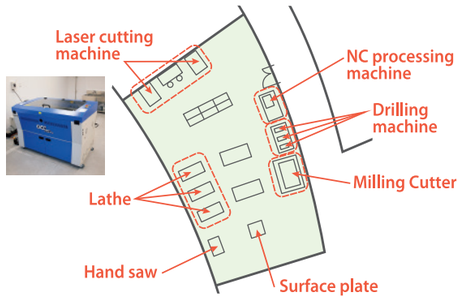
Focus
Examine a problem in a variety of contexts in order to precisely define it

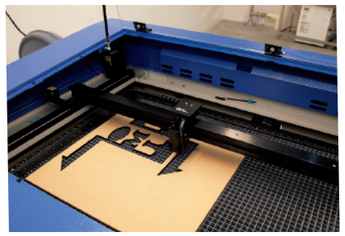
Conception
Share ideas to stimulate intellectual interaction

Design manufacture
Think by prototyping

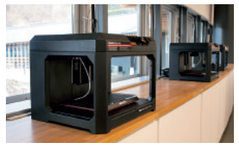
ICT's Maker Studio, where students' ideas take shape

Machines and tools for prototyping with a view to actual implementation





Laser cutting machine
Automatically process shapes described in Word or Illustrator files



3D printers

Creating a sustainable society

Department of Science and Technology

Our society's future is uncertain due to complex issues such as globalization in the economy and industry, low birth rate, aging population, decreasing labor force, natural disasters, and environmental problems. There is a need for innovative solutions in all of these areas. Simply responding to change is not enough. We must fully mobilize the new fields in the Fourth Industrial Revolution (AI, IoT, robotics, big data, cybersecurity, etc.) to lead in the creation of a sustainable future. Our department's mission is to foster engineers who can meet these social needs.

Liberal Arts for Science and Engineering and Engineering Education based on the World Standard CDIO

STEM education in English (learn to think science and technology in English)

Fundamental STEM education
Develop sound understanding and communication skills
- Mathematics, physics, chemistry, biology
- Learn from nature and from history

Engineering Design (science and engineering as liberal arts)
Engineering Design Education
- Creative teamwork to identify and solve problems
- Implement and assess newly created things and systems

Sharpen thinking skills (Design thinking + IT + Data science)
- Engineering Context
- Computer Skills

Extracurricular programs (many learning opportunities in the local community and overseas)
Develop personal and social skills
- Regional collaboration
- Internships
- International COOP education
- Learning sessions etc.

Admission

Develop abilities in:
- Creativity
- Teamwork
- Problem-solving
- Self-directed study
- English communication
- Presentation skills
- Applying knowledge to create new value

CDIO
Conceive
Design
Implement
Operate

Next stage: creation and innovation in collaboration with KIT

Global Innovator

STAGE 1	STAGE 2	STAGE 3 · 4
1st 2nd year Boarding School	3rd year Study in New Zealand	4th and 5th year, 3rd and 4th year at KIT, graduate school Co-creation education and research at KIT

Study STEM (science, technology, engineering, math) in English

Scientific and technical thinking is developed through integrated STEM education in English. First-year classes are taught by teams of English- and Japanese-speaking teachers. Bridge English introduces technical and scientific terminology and supports the study of STEM in English. In the fourth and fifth year, more advanced English STEM education is offered in collaboration with KIT.

※STEM Education… A new education model for science and technology created in USA. It integrates the study of science, technology, engineering, and mathematics. Applying the tools and methods of science and technology is important in today's society.

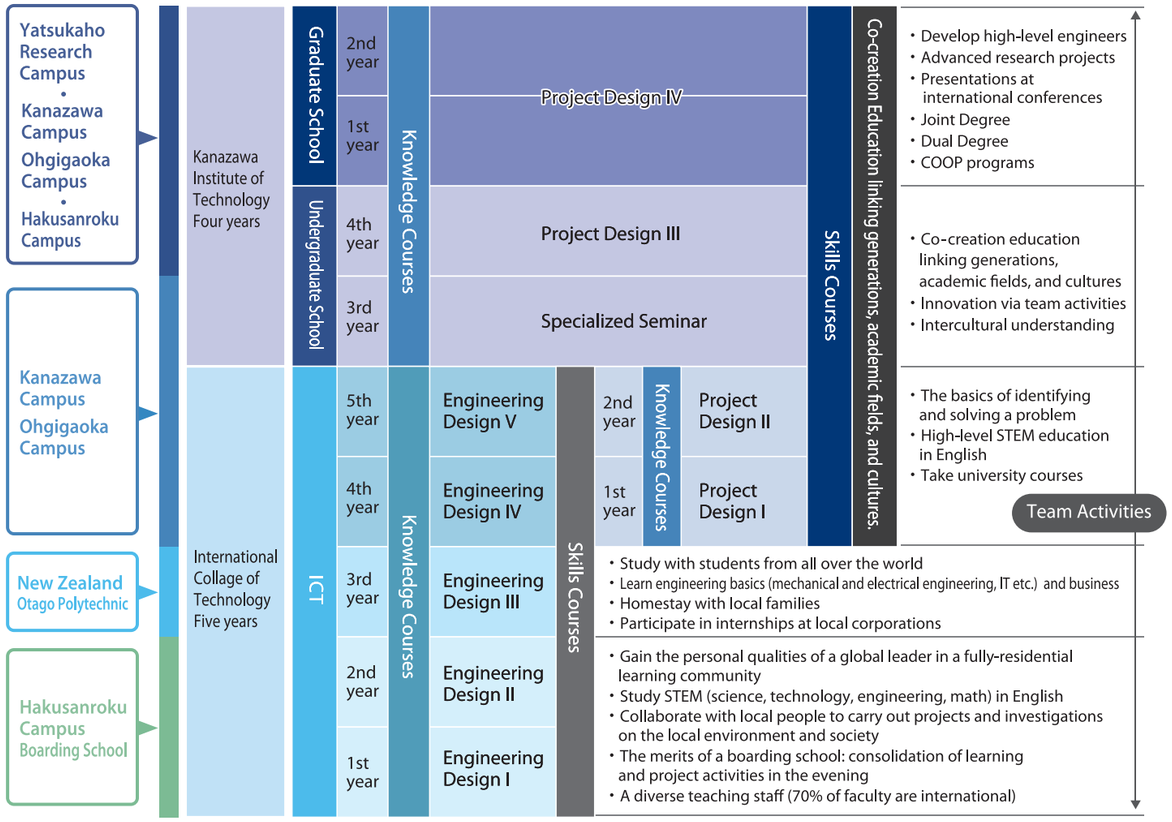
Start at Age 15 to Become a Global Innovator

"5 ICT +4 KIT," an Integrated 9-year Course

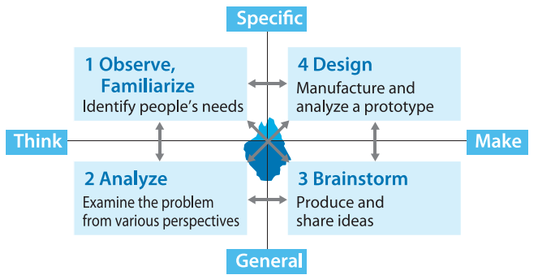
Japan. Committed to SDGs

KIT was awarded the Chief Cabinet Secretary Award of the first "Japan SDGs Award" on December 26, 2017.

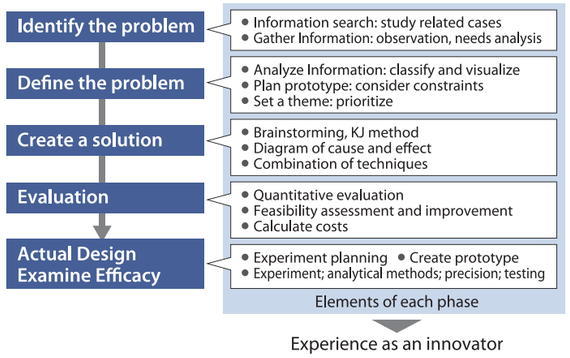
A global innovator looks for creative solutions to complex challenges, transcending the boundaries of language, culture, and academic fields to collaborate with others and create new value in the world. ICT and KIT foster leaders who, mindful of the Sustainable Development Goals (SDGs) agreed upon by the 193 countries of the United Nations, contribute to solving regional and global problems.



Engineering Design Education (Five years at ICT)



Project Design Education (after continuing to KIT)



1st year 2nd year

A Boarding School in the Midst of the Beautiful Nature of Hakusan

Study in English in a fully-residential learning community

ICT's Hakusanroku campus is a fully-residential program on the model of a European boarding school where students, teachers, and staff live and participate in classes and extracurricular activities together. Most of courses, including mathematics, science and IT, are taught in English. Science and engineering liberal arts provide flexible problem-solving skills for a rapidly-changing world. Classes are taught by teams of international and Japanese teachers who work together to support students as they cope with learning in a foreign language.

Liberal arts for science and engineering

ICT's liberal arts education integrates: 1) Engineering Design education, the core of the ICT curriculum, consisting of Design Thinking, IT, monozukuri, and problem-solving teamwork. 2) English STEM education, in which students gain a sure grasp of the fundamental principles of science and engineering, and the critical thinking skills for carrying them out, and 3) extracurricular activities such as regional collaboration projects and internships where students acquire good character and social skills.

Evening School

There are learning sessions from 7:30 pm to 9:30 pm, Monday to Friday. This additional study time enables students to consolidate what they have learned during the day and to prepare to actively participate in their next classes. Learning mentors watch over the sessions, while students are encouraged to learn from each another. The evening learning sessions are also a chance for students to receive language support according to their English skills to facilitate their study of science and technical courses in English. Extracurricular projects of various kinds are also carried out during these sessions.

Extracurricular Programs

Conscious of our connection with the Hakusanroku community, we carry out various research projects targeting the local society and environment. Students participate in Hakusanroku's effort to revitalize the local community with sustainable development. This first-hand experience using Hakusanroku as a living classroom strengthens students as global innovators.

A Community of Diversity

We form an English-speaking community, with 70% of faculty members with international backgrounds and experience in interacting with other cultures. Teachers are from the USA, UK, Canada, New Zealand, Malaysia, Taiwan, and Egypt.

3rd year

A Year Abroad in New Zealand

Study at Otago Polytechnic alongside students from all over the world

All third-year students study abroad at Otago Polytechnic in Dunedin, New Zealand. There, they study alongside students from all over the world while living with local families in a homestay program. Internships with local firms and a variety of team projects are also part of the program.

April

Students take the "Global Training" course at Hakusanroku campus to prepare for their school life oversea.

May, June

After arriving at Otago Polytechnic, students take "Functional English" and "Basic Engineering Skills" courses for two months to prepare for taking regular Polytechnic courses.

June~

ICT students take "Technical English" with other Otago Polytechnic students and choose three courses of their interest from technical subjects such as mechanical engineering, electronics, IT, and chemistry.

December~

In "Engineering Design III" students carry out either a one-month internship at a corporation or a research project in their field. Finally, students prepare a report in English of their achievements for their year abroad.

Otago Polytechnic

New Zealand's oldest national institution of higher education, Otago Polytechnic, and ICT have been partners since 2002. With their focus on producing graduates with practical skills and knowledge, polytechnics are highly regarded by corporations. Otago Polytechnic has over 7,000 students, including approximately 230 international students from 27 countries.

Improve English skills with a homestay family

Students live with a local family during their year abroad, further improving their English through daily interaction with their host family. They can make happy memories of leisure activities, and holidays such as Christmas, with their host family.

Using English Every Day My TOEIC score jumped to 830

Studied in New Zealand in 2016

Kota Shimada

I never was very good at English and I had a hard time keeping up with classes when I first started studying at New Zealand. However, one day I realized I could understand what people were saying. I think talking in English with my Chinese friend who was homestaying with me really helped. If I had any trouble, I could always talk to the local coordinators, and having friends studying aboard with me was a big support.
I really noticed my improvement when I returned to Japan: I could understand the jokes of the English teachers and it was easy to talk with them. My TOEIC score increased to 830.

4th year
5th year

Study with Kanazawa Institute of Technology Students

Pursue your field of study along with university students

Students take more advanced English STEM courses in their fourth and fifth-year. Also, they collaborate with KIT students in research and projects.

Co-creation education that transcends generations, academic fields, and cultures

KIT conducts its Project Design education to promote "co-creation education that transcends generations, academic fields, and cultures". Students find problems in society that hold real research value, and work with others to research and find innovative solutions to these problems. Working with people of different generations, academic fields, and cultures increases their ability as innovators.

4th year
5th year

University Graduate School

Co-create with the Local Community and Corporations (Yumekobo Research Activities)

Challenge Lab, Yatsukaho Research Campus

Participate in state-of-the-art innovation projects in an advanced research environment

KIT graduate school offers exchange programs with the University of Illinois, Rochester Institute of Technology and the University of Hawaii. A dual-degree program with Rochester Institute of Technology is available. KIT is a member of the World Association for Cooperative Education (WACE: headquarters in Boston, USA) and conducts international coop education.

This is the brainwave-controlled wheelchair developed by the KIT Information Technology and Artificial Intelligence Research Laboratory. AI is used to analyze the user's brainwave pattern and automatically move in the desired direction. This wheelchair is currently being tested in hospitals. KIT uses AI to identify and solve problems to produce new value in society.

Kanazawa Institute of Technology Research Centers

Innovative Composite Materials Research and Development Center(ICC) / Research Laboratory for Affective Design Engineering / Institute of Disaster and Environmental Science / Center for Electric, Optic and Energy (EOE) Applications / Human Information Systems Laboratory / Co-creative Research Center of Industrial Science & Technology / Optoelectronic Device System R&D Center / Laboratory of Psychological Sciences / Genome Biotechnology Laboratory / Information Technology and Artificial Intelligence Research Laboratory / Research Institute for Architectural Archives / Future Machine Technology Laboratory / Institute of Biomechanical Control Systems / Materials System Research Laboratory / Applied Ethics Center for Engineering and Science / Advanced Materials Processing Research Laboratory / Environmental Research Institute / Co-Creation and Innovation Laboratories for Local Communities / Actual Seas Ship and Marine Research Laboratory / KIT Aeronautics Laboratory / Integrated Technology Research Center of Medical Science and Engineering / Institute of Advanced Medical and Engineering Technology for Aging / Institute for Regional Revitalization and Innovation / Institute for Urban and Architectural Studies of Historic Kanazawa / AI Lab

Yatsukaho Research Campus

Fostering Leaders of Global Innovation

International Collage of Technology is a completely new school devoted to the education of global innovators who can create value in a rapidly changing society. We focus on teaching the fundamentals of STEM education in English in collaboration with Kanazawa Institute of Technology, and developing good character and leadership through the world standard CDIO educational process. KIT's science and engineering education is highly advanced; ICT collaborates with KIT to create a high-level educational system that produces new leaders for our future society.

As the students advance from year to year and move from campus to campus they can tackle increasingly complex challenges in each environment. In their first and second-year, students stay at the fully residential Hakusanroku campus. Here they collaborate with the local community and industry surrounded by the beautiful nature of the Hakusan foothills, participating in programs focused on SDGs (Sustainable Development Goals set by the United Nations). The next two stages—the third year in New Zealand followed by fourth and fifth year at Kanazawa Campus—provide them with the ideal environment for each step of personal development.

ICT admits students from throughout Japan and overseas, and provides an opportunity for students to grow in a stimulating global environment. We welcome you to join us in our quest to create new value for the world.

Lewis Barksdale,
President, International Collage of Technology

"No one left behind" is our philosophy

SDGs | The 17 goals to transform the world agreed upon by all members of the United Nations in 2015.

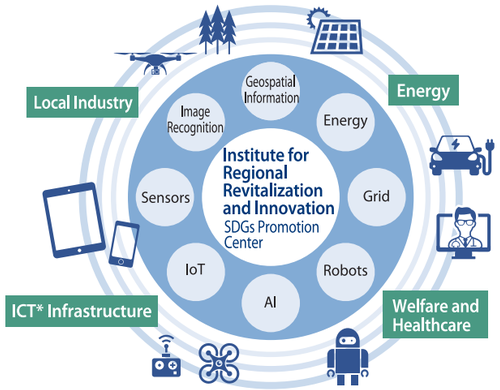
At International College of Technology we are carrying out social implementation projects which link local, everyday issues with the global challenges identified in the UN's 17 Sustainable Development Goals.

Solving local and global problems at the same time

Hakusanroku Campus

KIT Institute for Regional Revitalization and Innovation

A research center for collaboration with local corporations and organizations to promote innovation in the Hakusan foothills. Hakusanroku Campus is a hub for application of advanced innovations using AI, IoT and big data.



*ICT: Information and Communication Technology

KIT - IDEALS

K	Kindness of Heart	We show compassion toward others, are helpful and considerate, and sensitive of others' feelings. When we show a sympathetic nature, we are rewarded by the feeling and kindness.
I	Intellectual Curiosity	We pursue things of interest to our intellect, follow our passion for learning and use our discoveries for the benefits to others.
T	Team Spirit	When working with others on a team, we value each member's role. We look beyond our individual accomplishments to contribute toward the common goal.
I	Integrity	We adhere to high moral and ethical principles. We are fair, reliable and trustworthy. Our personal code of values complements our school community's code of values.
D	Diligence	With constant and earnest effort, we set out to accomplish what we undertake to the best of our ability. We use our time wisely and put care into all we do.
E	Energy	We tap all our potential energy and make positive use of our energy to produce greatness. We recognize and accept the limits of our own capabilities to maintain a healthy balance.
A	Autonomy	We strive to be independent, and self-sufficient. We respect the autonomy of the individual.
L	Leadership	When working with others, we share leadership roles and accept all the rights and responsibilities that are inherent in the position.
S	Self-Realization	We work toward achieving the highest good for all by fully realizing our own potential and natural abilities as we strive to become our ideal self.

Leadership Award Scholarship System

ICT supports student's innovation to create a world where "no one is left behind"

The SDGs (Sustainable Development Goals) are 17 goals to transform the world agreed upon by all members of the United Nations. At International College of Technology and Kanazawa Institute of Technology we are carrying out social implementation projects which link local, everyday issues with the global challenges identified in these goals. The Leadership Award Scholarships were created to support students who show exceptional leadership in carrying out these projects.

*KIT is Japan's leading educational institution pursuing SDGs, and received the Chief Cabinet Secretary Award of the first "Japan SDGs Award Presentation" on December 26, 2017.

With our mission to educate global innovators, ICT supports students who show leadership in a wide range endeavors with four "ICT Leadership Award Scholarship" programs.

1 ICT Leadership Award Golden Eagle Scholarship

Overview : To foster individuals who show leadership, deep understanding toward a sustainable world, and eager participation in solving issues in society.
Quota : 3 students
Target : 1st and 2nd year students
Evaluation criteria : Course grades of two years
Participation in SDGs Startup Program
Active leadership
Public presentation of personal growth
Amount : 1,400,000 yen

2 CWIE International COOP Education Scholarship

Overview : Awarded for participation in International COOP programs such as oversea internships and international conferences based on CWIE*1 (collaboration education with industry).
Quota : 4 students (2 students for 2018 students)
Target : 4th and 5th year students
Evaluation criteria : Course grades of previous years
Understanding of CWIE Participation in overseas corporation internships
Amount : 300,000 yen

*1 Cooperative and Work-Integrated Education for Innovation Minds

3 ICT Leadership Award Gold Scholarship

Overview : Granted to students who show outstanding leadership in and out of school.
Quota : 10 students
Target : All students
Evaluation criteria : Grades of all courses
Participation in various projects and activities in and out of school
Active leadership
Public presentation of personal growth
Amount : 300,000 yen

4 ICT Leadership Award Silver Scholarship

Overview : Granted to students who show outstanding leadership in and out of school.
Quota : 10 students
Target : All students
Evaluation criteria : Grades of all courses
Participation in various projects and activities in and out of school
Active leadership
Public presentation of personal growth
Amount : 250,000 yen

Method of payment		
	Golden Eagle Scholarship	Applied as part of tuition fee for Otago Polytechnic in New Zealand.
	Gold Scholarship / Silver Scholarship	Applied as part of following year's tuition. Fifth-year students' scholarship is applied as part tuition for after transferring to Kanazawa Institute of Technology.
	CWIE International COOP Education Scholarship	Applied as tuition fee for international COOP education destination.

1. The Golden Eagle Scholarship and Gold/Silver Scholarship may be awarded in combination.
2. The CWIE International COOP Education Scholarship may be awarded in combination with either the Gold or Silver Award.
3. The Gold and Silver awards are not awarded in combination.
4. The Golden Eagle Scholarship and CWIE International COOP Education Scholarship are not awarded in combination.
5. The CWIE International COOP Education Scholarship cannot be received multiple times.

Department of Science and Technology Curriculum 1st, 2nd and 3rd Years

The courses in red are for international students and Japanese returnees whose English is stronger than their Japanese. For such students, language arts and humanities course are offered in English, and Japanese as a foreign language is offered in place of English language courses.

	Minimum Credit Requirement: 38 credits		Minimum Credit Requirement: 38 credits		Minimum Credit Requirement: 32 credits	
	1st Year		2nd Year		Study in New Zealand	3rd Year
	1st Semester	2nd Semester	1st Semester	2nd Semester		Course Name
Special Activities	Special Activities ESD I (Education for Sustainable Development)		Special Activities ESD II (Education for Sustainable Development)		Internship at Company / Project with Company	
General Education Courses – Humanities	Japanese Language Expression IA (1) English Expression IA (1) Japanese Literature I (1) World Literature I (1)	Japanese Language Expression IB (1) English Expression IB (1)	Japanese Language Expression IIA (1) English Expression IIA (1)	Japanese Language Expression IIB (1) English Expression IIB (1) Japanese Literature II (1) World Literature II (1)	Humanities	Intensive course before studying abroad Global Studies (2)
	History and Culture IA (1) History and Culture (English) IA (1)	History and Culture IB (1) History and Culture (English) IB (1)	History and Culture IIA (1) History and Culture (English) IIA (1)	History and Culture IIB (1) History and Culture (English) IIB (1)		
Health and Physical Education	Health and Physical Education IA (1)	Health and Physical Education IB (1) Visual Arts I (1) Performing Arts I (1)	Health and Physical Education IIA (1) Visual Arts II (1) Performing Arts II (1)	Health and Physical Education IIB (1)		
Second Language	English Reading and Writing IA (1) Japanese IA (5) English Listening and Speaking IA (2) Bridge English (2)	English Reading and Writing IB (1) Japanese IB (2) English Listening and Speaking IB (1)	English Reading and Writing IIA (1) Japanese II (2) English Listening and Speaking IIA (1) Overseas English Program (4)	English Reading and Writing IIB (1) Japanese Communication (3) English Listening and Speaking IIB (2)	Second Language	Functional English (3) Technical English (4)
Natural Science	PreCalculus A (2) Fundamental Mathematics A (2) Physics IA (1) Chemistry IA (1) Biology IA (1)	PreCalculus B (2) Fundamental Mathematics B (2) Physics IB (2) Chemistry IB (2) Biology IB (1)	Calculus A (2) Algebra and Geometry A (2) Physics IIA (2) Chemistry IIA (2) Biology IIA (1)	Calculus B (2) Algebra and Geometry B (2) Physics IIB (2) Chemistry IIB (2) Biology IIB (1)		
Co-creation	Engineering Design IA (2) Engineering Context IA (1)	Engineering Design IB (2) Engineering Context IB (1)	Engineering Design IIA (2) Engineering Context IIA (1)	Engineering Design IIB (2) Engineering Context IIB (1)	Co-creation	Engineering Design III (8) Basic Engineering Skills (3)
IT Literacy	Computer Skills IA (1)	Computer Skills IB (1)	Computer Skills IIA (1)	Computer Skills IIB (1)		
Specialized Courses – Specialized Field					Specialized Field	Electric Circuits I (4) Electronic Engineering (4) Electrical Power Engineering (4) Mathematical Engineering (4) Sequence Control Engineering (4) Introduction to Networks (4) Engineering Mechanics (4) Mechanical Design (4) Heat Transfer Engineering (4) Fluid Engineering (4) Materials Science (4) Basic Electrical Engineering (4) Basic Programming (4) Programming (4) Web Design (4) Business Computing (4) Basic System Analysis (4) Basic Marketing (4) Management (4) Sustainable Business Practices (4) Basic Computer Engineering (4)

English STEM Education Courses

【English STEM Education Courses】

STEM stands for science, technology, engineering, and mathematics. It is a new curriculum based on the idea of interdisciplinary education in science and technology to teach students scientific thinking. The STEM education at International College of Technology is conducted in English. Students use English engineering terms and study science, math, physics, and chemistry in English. They accumulate knowledge from natural science courses and utilize it in co-creation courses, such as Engineering Design to realize their ideas and create new value.

【Engineering Design I, II】

Based on design thinking, we form teams and take on project-based activities aiming to create new value for a sustainable society. Teams examine the task, listen to feedback, and implement their ideas.

【Engineering Context I, II】

In this course, students learn principles of creating things and experiences, the ability to fully utilize IT and big data, and ethical issues concerning technology in society and environment.

【Visual Arts I, II】

Students become insightful members of global society by studying art and culture to gain a wide perspective, sensitivity, rich creativity, and the ability to express themselves. By interacting with people of various cultural backgrounds and technological fields, students will expand their skills in communication and cooperation.

【Performing Arts I, II】

Students develop good expression skills through practicing pronunciation, breathing techniques, speaking techniques, making speeches, acting, dancing, and becoming familiar with the world of music, drama, and dance. We also cover art, craft, and design, to increase students' sensitivity, deepen their knowledge in art, and cultivate their inspiration and expression.

Otago Polytechnic in New Zealand

Classroom in New Zealand

【Global Studies】

In order for students to fully benefit from their academic year in New Zealand, we provide preparatory training in advance. This includes gaining a sufficient level of English for a smooth homestay experience and learning to respect and be compassionate to others. Students individually study the local geography, culture, and activities of their future campus area. This information is valuable for living a comfortable life there. They also prepare for the courses they will take.

【Functional English】

Students will learn the necessary skills to live a smooth life in New Zealand. They will learn the characteristics of English speakers and how to effectively communicate in their everyday life. The ability to adapt to a foreign environment and communicate their thoughts and feelings in familiar/unfamiliar circumstances will improve their skills in teamwork, communication, negotiation, cognitive thinking, and cooperating in a multi-cultural team project.

【Engineering Design III】

Students will gain an integrated knowledge of technology and engineering. Through repeated discussions with instructors and team members they choose and define a project area and prepare a design. This is followed by the production process and system creation. Students prepare reports on the purpose and manufacturing process of the project, while building actual prototypes, computer models, and/or computer systems. The outcomes of these projects are presented to other students, teachers, and corporations in various formats using English.

【Training in Basic Engineering】

Students learn to apply their knowledge in mathematics and physics through practice with CAD and 3D modeling.

【Specialized Field】

Students choose three courses which match the goals they set.

Required Courses (credit)
Elective Courses (credit)
English STEM Education Courses
Otago Polytechnic Courses (credit)

Department of Science and Technology Curriculum 4th and 5th Years

		4th Year		5th Year	
		Minimum Credit Requirement: 32 credits		Minimum Credit Requirement: 27 credits	
		1st Semester	2nd Semester	1st Semester	2nd Semester
Special Activities		Special Activities Humanity and Nature I		Special Activities Humanity and Nature II	
Internship		Internship I (1)		Internship II (1)	Entrepreneurship (1)
General Education Courses	Humanities	Academic Writing (1)			
		Social Science (2)	Humanities (2)	Psychology (2)	
	Health and Physical Education	Health and Physical Education IIIA (1)	Health and Physical Education IIIB (1)		
	Second Language	Comprehensive English IA (1)	Comprehensive English IB (1)	Comprehensive English IIA (1)	Comprehensive English IIB (1)
		Technical Communication (2)			
	Natural Science	Mathematical Statistics (2)			
	Co-creation	Engineering Design IV A (2)	Engineering Design IV B (2)	Engineering Design V A (2)	Engineering Design V B (2)
	Basic Engineering	Applied Mathematics IA (2)	Applied Mathematics IB (2)	Applied Mathematics IIA (2)	Applied Mathematics IIB (2)
				Engineering Mathematics (2)	
		Applied Physics IA (2)	Applied Physics IB (2)	Applied Physics IIA (2)	Applied Physics IIB (2)
		Applied Chemistry IA (2)	Applied Chemistry IB (2)	Applied Chemistry IIA (2)	Applied Chemistry IIB (2)
		Applied Biology I (2)			Applied Biology II (2)
		English STEM Education Courses			
Specialized Courses	Specialized Field	Electric Circuits IIA (2)	Electric Circuits IIB (2)	Electronic Circuits (2)	Electrical Machinery and Electronic Applications (2)
		Electromagnetics A (2)	Basic Electronic Circuits (2)	Electric and Electronic Materials Engineering (2)	Electrical and Electronic Instrumentation Engineering (2)
		Technical Drawing (2)	Electromagnetics B (2)	Mechanics of Materials II (2)	Control Engineering (2)
		Machining (2)	Mechanics of Materials I (2)	Measurement Engineering (2)	Information Mathematics IIB (2)
		Information Mathematics I (2)	Computer System B (2)	Information Mathematics IIA (2)	Database (2)
		Computer System A (2)	Software Engineering (2)	Software Engineering Lab (2)	Business Accounting (2)
		Fundamental of Laboratory Safety (2)	Data Structures and Algorithms (2)	Introduction to Management (2)	Applied Experiment and Practice in Chemistry B (3)
		Chemistry of Phase and Reaction (2)	Chemical Engineering (2)	Applied Experiment and Practice in Chemistry A (3)	Polymer Chemistry (2)
			Analytical Chemistry (2)	Programming A (2)	
			Computer Architecture (2)		
		Programming Lab A (2)	Design of Machine Element (2)	Transient Phenomena (2)	Materials Engineering (2)
			Thermodynamics (2)	Drawing Skills in Electrical Engineering (1)	Physical Electronics (2)
			Fluid Mechanics (2)	Thermal Engineering (2)	Network Systems Lab (2)
			Programming Lab B (2)	Operating System (2)	Media Informatics (2)
			Electrochemistry for Energy Conversion and Storage (2)	Environmental Chemistry (2)	Advanced Topics in Business (2)
					Programming B (2)

【Engineering Design IV】

Students deepen their understanding of the local society and economy while cooperating with other engineers from other fields and utilizing their basic technological experience and skill to develop a proposed solution for a societal need on a broader scale. This activity teaches the ability to understand the true nature of a problem, analyze how to solve the problem, creatively plan, and communicate efficiently.

【Engineering Design V】

Students independently find real-life problems in society and learn the problem-solving process firsthand by taking on the mission of planning, researching, analyzing, experimenting, evaluating, and presenting. The results are introduced in the form of a product and a written report. Students have the opportunity to display their knowledge and/or skill in this activity and learn to challenge themselves as global innovators to realize the value they conceived.

Required Courses (credit) / Elective Courses (credit) | English STEM Education Courses | Compulsory Elective Courses (credit)

International College of Technology, Kanazawa

Department / Capacity

Department of Science and Technology 90 Students

Examination Schedule 2019

	Application period	Examination date	Venues	Announcement of results	Admission procedure deadline
Global admission A	Sep.26(Wed)-Oct.12(Fri), 2018	Oct.27(Sat), 2018	Singapore, Bangkok, Kanazawa, Tokyo, Osaka	2:00, Nov.7(Wed), 2018	Nov.21(Wed), 2018
Global admission B	Oct.23(Tue)-Nov.2(Fri), 2018	Nov.17(Sat), 2018	Singapore, Bangkok, Kanazawa, Tokyo, Osaka	2:00, Nov.28 (Wed), 2018	Dec.14(Fri), 2018
Admission for Returnee Japanese students	Nov.19(Mon)-Nov.30(Fri), 2018	Dec.8(Sat), 2018	Kanazawa, Tokyo, Osaka	2:00, Dec.14(Fri), 2018	Dec.21(Fri), 2018
General admission A	Jan.7(Mon)-Jan.16(Wed), 2019	Jan.26(Sat), 2019	Kanazawa, Tokyo, Osaka	2:00, Feb.1(Fri), 2019	Feb.13(Wed), 2019
General admission B	Jan.28(Mon)-Feb.6(Wed), 2019	Feb.16(Sat), 2019	Kanazawa, Tokyo, Osaka	2:00, Feb.22(Fri), 2019	Mar.7(Thu), 2019
Admission based on recommendation	Jan.28(Mon)-Feb.6(Wed), 2019	Feb.16(Sat), 2019	Kanazawa, Tokyo, Osaka	2:00, Feb.22(Fri), 2019	Mar.7(Thu), 2019

Foreign students and Japanese returnees please contact the Admission Center before applying.

Examination fee 15,000 yen

Admission fee 200,000 yen

Fees

(1) Tuition

	First semester	Second semester	Total annual fee	Remarks
1st year	1,500,000 yen	1,500,000 yen	3,000,000 yen	Includes residence fees
2nd year	1,500,000 yen	1,500,000 yen	3,000,000 yen	Includes residence fees
3rd year	125,000 yen	125,000 yen	250,000 yen	
4th year	800,000 yen	800,000 yen	1,600,000 yen	
5th year	800,000 yen	800,000 yen	1,600,000 yen	

The fees for 1st- and 2nd years include the dormitory fee and meals.

4th- and 5th-year fees do not include the dormitory fee or meals.

1st-, 2nd- and 3rd-year students are eligible for Tuition Support for High School Students.

(2) Fees for study abroad to be paid by 3rd-year students attending Otago Polytechnic, New Zealand are estimated as follows:

(The exchange rate in 2021 is calculated at NZ$1.00 = 90.00 yen)

	Amount	Description
3rd year Otago Polytechnic tuition	1,700,000 yen	1. Tuition determined in February 2021 by Otago Polytechnic in accordance with New Zealand regulations. 2. The tuition for Otago Polytechnic must be paid in a lump sum in March 2021.
Home stay charge	1,050,000 yen	1. Home stay charge. 2. Extracurricular activities, insurance for sickness, injury, compensation for damage, etc. The above fees are payable in March 2021.
The above amounts do not include travel expenses.		

(3) Additional fees (annual)

Parent Association fee: 20,400 yen
Student Association fee: 9,600 yen
Alumni Association fee: 6,000 yen

・Please check the Admission Guide for further information.