

# COLLEGE CATALOGUE 2018



National Institute of Technology, Toyama College

# 1. Introduction

## Greetings from President



President TAKAMASA Tomoji

### Education Philosophies

**Originality and Creation**  
**Autonomy and Independence**  
**Coexistence and Symbiosis**

I would like to express my sincere gratitude to all of our stakeholders at the National Institute of Technology, Toyama College, namely the parents, members of our alumni association, and various organizations and businesses in Toyama Prefecture, for the continued cooperation and support you have shown toward our school's education and research.

Japan, a maritime state surrounded by the sea on every side, is known as one of the world's leading science-and-technology-oriented nations. In addition, historically, Toyama, as a maritime prefecture, has served as an important relay port for the route of the *kitamaebune* ("northern-bound ships") that stretched from Hokkaido to Nagasaki and the Ryukyu Kingdom. With the twin pillars of the pharmaceutical and scientific industries that emerged out of this mercantile background, and the material processing industry that began with the use of energy from dams in the Tateyama Mountain Range, Toyama has become one of Japan's leading industrial prefectures. Continuing to train "personnel capable of creating innovation, playing an active role in the global world of today, and making a contribution to society" in these maritime and scientific-technological fields represents an important task for guiding the future of both Japan and Toyama Prefecture.

Colleges of technology (KOSEN) provide education that covers a different span than either high schools or universities, lasting from enrolment at 15 years of age, to graduating from the core course at 20 years of age or completing an advanced course at 22 years of age. However, it is during this period, a time when we develop most as human beings over the course of our long lives, that consistent engagement by young people with science and engineering, which entails many steps, from mastering the basics to application, or else with advanced specialist education, is extremely important for training personnel in Japan's maritime and scientific-technological fields. The National Institute of Technology, Toyama College is the only KOSEN in Japan to have six departments in the core course that span a wide range of educational fields; these include four engineering departments (the Department of Mechanical Engineering, the Department of Electrical and Control Systems Engineering, the Department of Applied Chemistry and Chemical Engineering, and the Department of Electronics and Computer Engineering), one liberal arts department (the Department of International Business), and the Department of Maritime Technology. In the 2-year advanced course that builds on the core course, we offer a consistent 7-year engagement with teaching to further the advancement of education and research. Approximately half of the graduates from our core course find jobs in the corporate sector, while the remaining half transfer into the third year of studies at national universities or go on to an advanced course at our own school. The employment and continuing education track record among our recent graduates far exceeds that of not only other KOSEN, but also other educational institutions in the area, and as the foremost of the 51 KOSENs in Japan, our school has become one of the leading institutions of higher education, with a mission to train engineers, businesspeople, and maritime engineers who can play an active role in Japan and around the world.

National Institute of Technology, Toyama College is working even harder to leverage these characteristics to provide firm support for our students' initiatives and the formation of communication networks. Further, we have instructed our staff to be of one mind in working to enhance their teaching, related research, and social engagements that can provide our students with the ability to make their own way in society or else set them on the path toward their next step. I would therefore like to thank you all for your continued guidance and encouragement.

### Contents



1. Introduction	1
2. Organization	5
3. Departments	7
4. Advanced Courses	14
5. Faculty Members List	16
6. Center for Collaborative Solution	19
7. Center for Promotion and Advancement of Research	19
8. Center for International Education and Research	20
9. Facilities	21
10. School Life	22
11. Collaboration with Local Communities	24
12. Research Work	25
13. International Exchange Programs	26
14. Financial Affairs	28
15. Enrollment Statistics	30
16. Alumni Post-Graduation Employment / Education	31

## Educational Objectives

### 1. Development of human resources with both specialized knowledge and skills that can contribute to promote research and development and business in the future

The objective of the National Institute of Technology, Toyama College is “Development of creative human resources with practical and specialized knowledge and skills.” To attain this objective, we educate each student to meet their hope and at the same time respond to the needs of society. Particularly, we develop human resources that can play an active part in both research and development and local business.

### 2. Development of human resources with the ability to think by themselves and act independently

Our college develops human resources that can think by themselves and act independently utilizing technology. For making better society, it is important to communicate your ideas with others and act by cooperating with people around you.

### 3. Development of human resources with a broad education, with sense of ethics, and with the spirit of coexistence with others

In order to play an important role in the fields of both research and development and business, it is essential to understand the effects of technology and business on society and nature, and to acknowledge the responsibilities of both engineers and business persons. Therefore, we develop human resources that respect the ethics of engineers and possess the spirit of coexistence with nature and the earth.

## Admission Policy for the Program of Associate Bachelor’s Degree

This college respects the individuality of each student and helps each one to acquire his/her capabilities through its well-developed cultural education as well as its practical and specialized education. The program that we offer will be given to students from the viewpoint of the Sea of Japan Rim Region.

Based on the above policy, each department seeks the following students who demonstrate consideration for people, society, nature and the environment:

#### Department of Mechanical Engineering

1. Students who are interested in machines, structures and mechanical systems
2. Students who want to become mechanical engineers with a fertile creative mind
3. Students who want to create systems from energy to recycling and contribute to society

#### Department of Electrical and Control Systems Engineering

1. Students who are interested in manufacturing such as electronic work and mechanical work
2. Students who want to acquire integrated knowledge of electronics, machinery and information technology; which is required in such as robot technology
3. Students who want to create new technology with originality and ingenuity

#### Department of Applied Chemistry and Chemical Engineering

1. Students who are interested in the world of chemistry
2. Students who aim to develop harmless manufacturing method for earth and people
3. Students who want to contribute to building a sustainable society

#### Department of Electronics and Computer Engineering

1. Students who like manufacturing and are interested in computers
2. Students who want to acquire integrated technology of information, electronics, and communication
3. Students who want to become engineers that can think by themselves and act independently, and to contribute to society

#### Department of International Business

1. Students who are interested in foreign languages and different cultures
2. Students who want to acquire knowledge of business fields
3. Students who want to play active roles in society with a global perspective

#### Department of Maritime Technology

1. Students who respect oceans and nature
2. Students who aim to become captain or chief engineer of a large vessel
3. Students who aim to become engineers of large machinery
4. Students who want to play active roles in countries all across the world

## ■ Admission Policy for Advanced Course

The Advanced Course aims to develop human resources that have a broad education and sophisticated specialized knowledge. Based on the above policy, each advanced course seeks the following students:

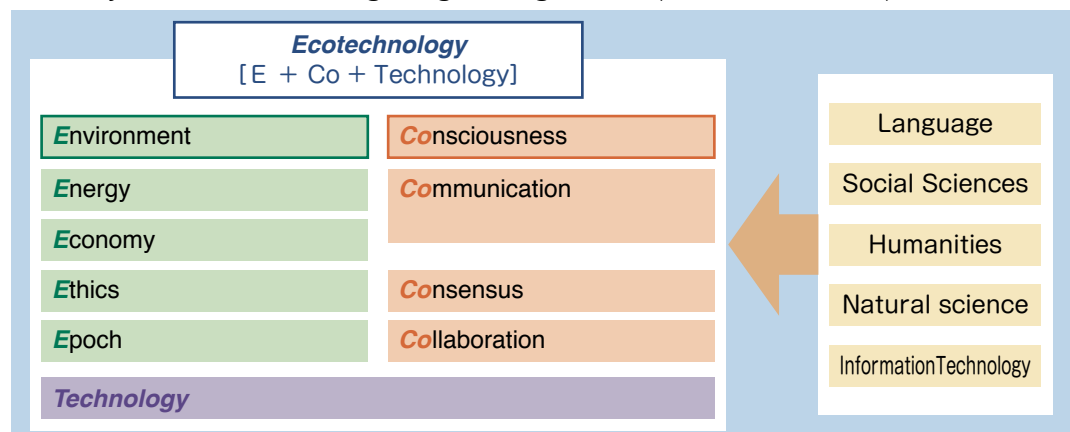
1. Students who want to improve their specialized academic skills, and further acquire design abilities that can be obtained with association with practical skills and multifaceted way of thinking
2. Students who want to acquire the ability to conduct research and development and who can continuously make an effort to solve a problem
3. Students who respect ethics as members of society and want to contribute to society as specialists with a global perspective

## ■ Educational Program for JABEE

The ECODesign Engineering Course and Control Information Systems Engineering Course of the Advanced Course provide the following educational programs with students. These educational programs have been approved by the Japan Accreditation Board for Engineering Education (JABEE). Students enrolled in their respective majors constitute students enrolled in each educational program. If they satisfy the JABEE completion criteria by mastering the designated subjects in the core or advanced courses, they will be eligible for qualification as an associate professional engineer.

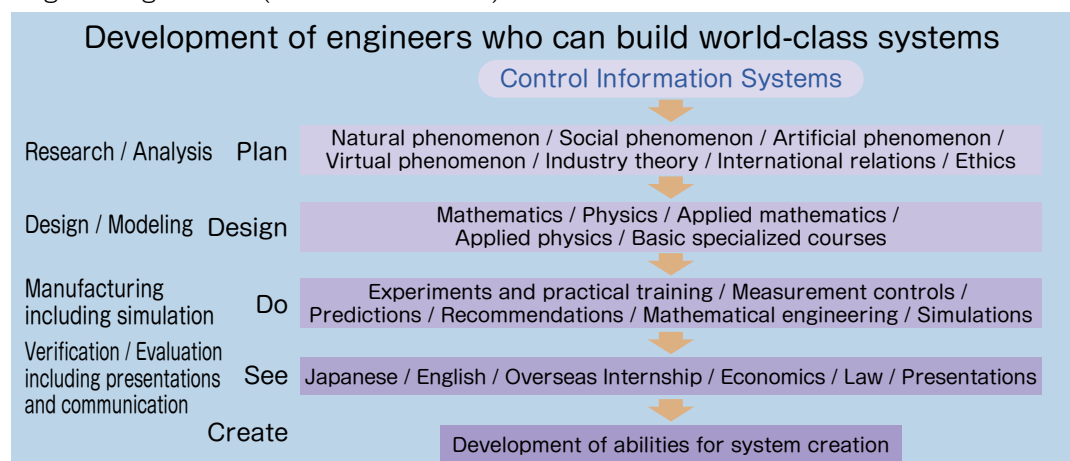
### ECODesign Engineering Program (Hongo Campus)

The ECODesign Engineering Course provides the educational program, “ECODesign Engineering”, with students. This program is carried out in the fourth and fifth years in three departments, mechanical engineering, electrical and control systems engineering, and applied chemistry and chemical engineering, and in the first and second years in the ECODesign Engineering Course (Advanced Course).



### Control Information Systems Engineering Program (Imizu Campus)

The Control Information Systems Engineering Course provides the educational program, “Computer Systems Engineering (CSS) 2008”, with students. This program is carried out in the fourth and fifth years in Department of Electronics and Computer Engineering, and in the first and second years in the Control Information Systems Engineering Course (Advanced Course).





## ■ External evaluation on education system

### 1 Accreditation by the National Institution for Academic Degrees and University Evaluation

Colleges of National Institute of Technology are required to be periodically evaluated by the evaluation organizations that has officially certified by the Minister of Education about enforcement situations of both education and research.

Before unification of our college in 2009, Toyama National College of Maritime Technology and Toyama National College of Technology were audited in 2005 and 2007, respectively, for accreditation as a high educational institution and received certification that the evaluation standards for the high educational institution had been met.

The accreditation is conducted for the following purposes, and the evaluation results and the self-evaluation statements are published on the website to provide the status of educational and research activities of our college to society. In addition, since the merger, review and certification were obtained in the 2016 academic year.

1. To assure the quality of educational and research activities of colleges by periodically evaluating colleges according to the evaluation standards, which were prescribed by the National Institution for Academic Degrees and University Evaluation.
2. To improve the educational and research activities of the college by sending back the evaluation results to each college.
3. To promote the public's understanding that a college has been established and operated as a public institution by clarifying and publishing educational and research activities of the college.

### 2 Review of Advanced Course by the National Institution for Academic Degrees and University Evaluation

Our school offers an advanced course composed of four programs (the ECOfdesign Engineering Program, the Control Information System Engineering Program, the International Business Program, and the Maritime System Engineering Program) corresponding to the six departments. The teaching system for the advanced course is subject to periodic review by the National Institution for Academic Degrees and Quality Enhancement of Higher Education (NIAD-QE), and our advanced course was last reviewed and certified in 2009, the year of the merger.

These four programs (the ECOfdesign Engineering Program, the Control Information System Engineering Program, the International Business Program, and the Maritime System Engineering Program) received accreditation by NIAD-QE under its Special Provisions for Awarding a Bachelor's Degree. Accordingly, applications for the conferral of a bachelor's degree from students enrolling in the 2014 academic year or later for the ECOfdesign Engineering Program, Control Information System Engineering Program, and Maritime System Engineering Program, and from students enrolling in the 2015 academic year or later for the International Business Program who are currently enrolled in the final year of their program and expected to complete the program at the end of the current school year, are exempted from examinations on their results of their studies, simplifying the document submission process.

### 3 Review by Japan Accreditation Board for Engineering Education (JABEE)

Advanced Course provide the ECOfdesign Engineering Course and Control Information Systems Engineering Course with students. These two programs are carried out in the fourth and fifth years of the associate bachelor's course, and in the first and second years of the Advanced Course. These educational programs have been approved by the Japan Accreditation Board for Engineering Education (JABEE). The former was approved in 2004 and was certified again in a continuing review in 2009. In addition, in 2015, we received re-certification as the same program that consisted of the Department of Mechanical Engineering, the Department of Electrical and Control Systems Engineering, and the Department of Applied Chemistry and Chemical Engineering, as well as the corresponding advanced course. The latter was approved in 2008, and was certified again in a continuing review in 2014. Students of these two courses are required to complete courses of these educational programs.

### 4 Certification Review of Department of Maritime Technology as STCW Educational Institution

The education program of the Department of Maritime Technology aims to acquire a maritime officer's certificate (International standard) at the time of graduation, and is reviewed by the Ministry of Land, Infrastructure, Transport and Tourism every five years. The Ministry of Land, Infrastructure, Transport and Tourism reviews and certifies that education programs of the educational institutions for maritime officers in Japan meet STCW (Standards of Training, Certification and Watch keeping for Seafarers) and reports the status to IMO (International Maritime Organization). The Department of Maritime Technology of the National Institute of Technology, Toyama College is certified as a proper educational institution for maritime officers by the Quality Standard System according to STCW.

## History of National Institute of Technology, Toyama College

### History of Toyama National College of Technology (Prior to 2009)

April	1964	Toyama National College of Technology, consisting of the Department of Mechanical Engineering, Electrical Engineering and Industrial Chemistry, established
April	1969	Department of Metallurgical Engineering newly established
April	1989	Department of Industrial Chemistry reorganized into the Department of Chemical and Biochemical Engineering
April	1993	Advanced Courses with a Mechanical and Electrical System Engineering Course and Functional Materials Engineering Course, established.
October	1994	Toyama National College of Technology, 30th anniversary The 1st ASIAN SYMPOSIUM ON ECOTECHNOLOGY-Toyama '94
April	1995	Department of Metallurgical Engineering reorganized into the Department of Ecomaterials Engineering.
April	2004	Toyama National College of Technology, Institute of National Colleges of Technology (Independent Administrative Corporation) established
May	2005	School Education Program (ECODesign Engineering) accredited by JABEE (Japan Accreditation Board for Engineering Education)
October	2007	14th ASIAN SYMPOSIUM ON ECOTECHNOLOGY at KyungHee University in Korea (Sponsored by Institute of National Colleges of Technology; Managed by Toyama National College of Technology)
November	2007	School Activates for "EcoAction 21" authorized and registered by the Institute of Global Environmental Strategies Center for Sustainability
March	2008	Accredited by the National Institution for Academic Degrees and University Evaluation

### History of Toyama National College of Maritime Technology (Prior to 2009)

July	1906	Shinminato First Grade Mercantile Marine School established
April	1909	Transfer of administration to Toyama Prefecture
August	1939	Renamed Toyama Prefectural Marine School School administration transferred to the Ministry of Education Renamed Toyama National Mercantile Marine School
June	1967	Renamed Toyama National College of Maritime Technology (Department of Nautical Engineering and Department of Marine Engineering)
March	1969	Location changed to the present campus (Ebie Neriya, Imizu City) Size of Department of Nautical Engineering increased by one class
April	1985	Two classes of the Nautical Engineering Department reorganized into one Department of Computer Engineering established
April	1988	Departments of Nautical Engineering and Marine Engineering combined into the Department of Maritime Technology (Nautical Science and Marine Engineering courses) Department of Electronics and Control Engineering established
April	1996	Department of International Trade and Transport established
April	2004	Toyama National College of Technology, Institute of National Colleges of Technology (Independent Administrative Corporation) established
April	2005	The Advanced Course established (Maritime System Engineering, Control Information Systems Engineering)
March	2006	Accredited by the National Institution for Academic Degrees and University Evaluation
October	2006	100th Anniversary ceremony held
April	2009	School Education Program (Control Information Systems Engineering) accredited by JABEE (Japan Accreditation Board for Engineering Education)

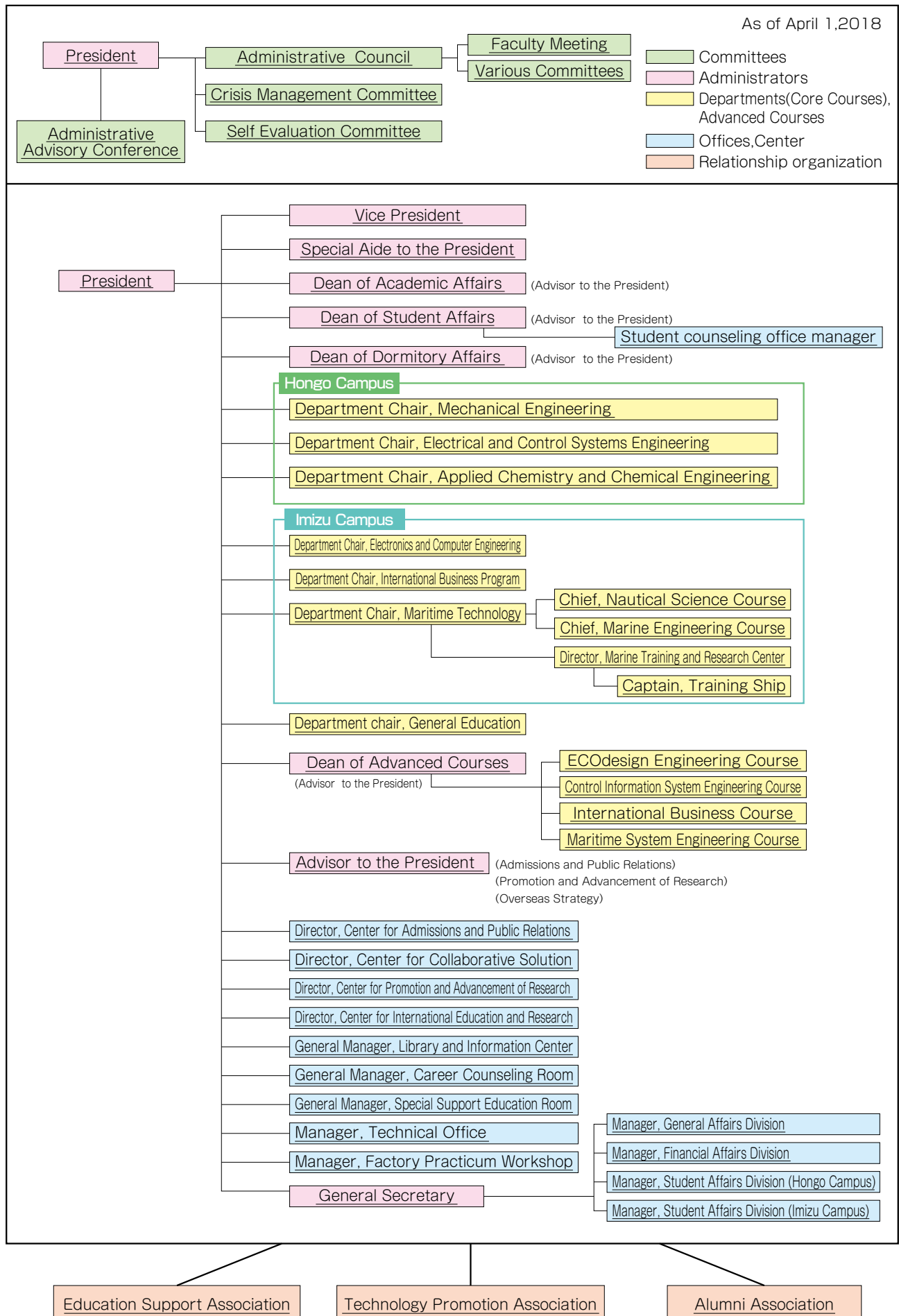


### History of National Institute of Technology, Toyama College

October	2009	National Institute of Technology, Toyama College established (Department of Mechanical Engineering, Department of Electrical and Control Systems Engineering, Department of Applied Chemistry and Chemical Engineering, Department of Electronics and Computer Engineering, Department of International Business, Department of Maritime Technology and Advanced Course)
April	2010	New students of Core Course and Advanced Course start school
March	2015	First graduation ceremony held
October	2015	A ceremony celebrating our 50th and 110th anniversaries held
March	2017	Institutional Certified Evaluation and Accreditation as a College of Technology by the National Institution for Academic Degrees and Quality Enhancement of Higher Education (NIAD-QE)

## 2. Organization

### Organizational Chart



## ■ Administration Staff

As of May 1, 2018

President	TAKAMASA Tomoji
Vice President	TERANISHI Tsunenobu
Vice President	MIZUTANI Junnosuke
Dean of Academic Affairs (Aide to the President)	SHIBATA Hiroshi
Dean of Academic Affairs (Aide to the President)	TSUKADA Akira
Dean of Student Affairs (Aide to the President)	KAWAFUCHI Hiroyuki
Dean of Student Affairs (Aide to the President)	MIZUMOTO Iwao
Dean of Dormitory Affairs (Aide to the President)	HIBI Naohiro
Dean of Dormitory Affairs (Aide to the President)	TOGA Shinji
Advisor to the President (Admissions and Public Relations)	KAWAI Takae
Advisor to the President (Promotion and Advancement of Research)	TAKADA Eiji
Advisor to the President (Overseas Strategy)	AOYAMA Akiko

### Departments

Department Chair, Mechanical Engineering	OKANE Masaki
Department Chair, Electrical and Control Systems Engineering	NISHI Toshiyuki
Department Chair, Applied Chemistry and Chemical Engineering	TAKAHIRO Masahiko
Department Chair, Electronics and Computer Engineering	OGUMA Hiroshi
Department Chair, International Business Program	NISHIHARA Masahiro
Department Chair, Maritime Technology	YAMAMOTO Keiichiro
Chief, Nautical Science Course	KAWAI Masashi
Chief, Marine Engineering Course	YAMAMOTO Keiichiro
Director, Marine Training and Research Center	SASAYA Keiji
Captain, Training Ship	NAKAMATSU Hideya
Department chair, General Education	TAKAKUMA Tetsuya
Chief, General Education	TAKAKUMA Tetsuya
Chief, General Education	KAWAI Hitoshi

### Advanced Courses

Dean of Advanced Courses (Aide to the President)	ASO Tsukasa
Chief, General Education	TAKAHASHI Katsuhiko
Chief, General Education	FURUYAMA Shoichi

### Center for Admissions and Public Relations

Director, Center for Admissions and Public Relations	KAWAI Takae
--	-------------

### Center for Collaborative Solution

Director, Center for Collaborative Solution	TAFU Masamoto
---	---------------

### Center for Promotion and Advancement of Research

Director, Center for Promotion and Advancement of Research	TAKADA Eiji
--	-------------

### Center for International Education and Research

Director, Center for International Education and Research	HOMAE Tomotaka
---	----------------

### Library and Information Center

General Manager, Library and Information Center	SHINA Toru
---	------------

### Career Counseling Office

General Manager, Career Counseling Room (Hongo Campus)	SHIBATA Hiroshi
General Manager, Career Counseling Room (Imizu Campus)	TSUKADA Akira

### Special Support Education Office

General Manager, Special Support Education Room	TERANISHI Tsunenobu
---	---------------------

### Technical Office

Manager, Technical Office	MIZUTANI Junnosuke
---------------------------	--------------------

### Factory for practical training

Manager, Factory Practicum Workshop	HAYAKAWA Yukihiro
-------------------------------------	-------------------

### Student Counseling Office

Manager, Student Counseling Room (Hongo Campus)	ADACHI Mayuko
Manager, Student Counseling Room (Imizu Campus)	HAYASE Yoshikazu

### Secretariate Division

General Secretary	WATANABE Satoshi
Manager, General Affairs Division	IKEDA Hirokazu
Manager, Financial Affairs Division	MURAMICHI Toshikazu
Manager, Student Affairs Division (Hongo Campus)	TODA Katsumi
Manager, Student Affairs Division (Imizu Campus)	SASAOKA Hiroshi

## ■ Faculty Members

Number of faculty and staff As of May 1, 2018

President	1
Professors	48
Associate Professors	48
Lecturer	8
Assistant Professors	15
Research Associate	1
Sub-total	121
Secretarial Staff	60
Technical Staff	24
Sub-total	84
<u>Total</u>	205
Special Project Fellows	4

Breakdown of number of faculty members belonging to

Department of Mechanical Engineering	14
Department of Electrical and Control Systems Engineering	14
Department of Applied Chemistry and Chemical Engineering	15
Department of Electronics and Computer Engineering	13
Department of International Business	12
Department of Maritime Technology	13
Department of General Education (Hongo Campus)	15
Department of General Education (Imizu Campus)	15
Faculty Members at Center	5
Training Ship WAKASHIO-MARU	4
<u>Total</u>	120
Special Project Fellows	4



### 3. Departments

#### Department of Mechanical Engineering

##### Department of Mechanical Engineering Educational objectives

To develop engineers who comprehensively acquire knowledge, focusing on mechanical engineering as the basis of manufacturing and production technology, and play a role in equipment design, technology development and other engineering-related fields.

To develop engineers who acquire knowledge focusing on machinery and systems, mechanical materials, design and production, dynamics, energy measurement and control, and apply them to problem solving.

To develop engineers with a great amount of creative energy and an inquiring mind who acquire the ability for mechanical engineering thought and can develop and apply new technologies and new materials to basic system construction from a comprehensive perspective.



#### Curriculum

Classification	Subjects
Required Subjects	Fundamental Experiments for Manufacturing Engineers
	Introduction to Ethics for Engineers
	Fundamentals of Information Technology
	Engineering Mechanics I
	Manufacturing Practice I
	Fundamental Experiments for Engineers I
	Fundamentals of Materials Science and Engineering I
	Strength of Materials I
	Thermodynamics I
	Manufacturing Practice II
	Fundamental Experiments for Engineers II
	Fluids Engineering I
	Introduction to Graduation Research
	Experiments in Mechanical Systems I
	Experiments in Mechanical Systems II
	Safety Engineering
	Experiments in Mechanical Engineering III
	Graduation Research
Elective Subjects	Engineering Mechanics II
	Practice of Engineering Mechanics
	Fundamentals of Mechanical Drawing
	Practical Manufacturing and Engineering
	Information Processing I
	Energy Conversion Mechanics
	Applied Physics I
	Fundamentals of Materials Science and Engineering II
	Strength of Materials II
	Manufacturing Processes I
	Mechanics
	Mechanical Design and Drawing
	Information Processing II
	Thermodynamics II
	Applied Mathematics I
	Applied Mathematics II
	Electric and Electronic Circuit
	Mechanical Engineering Measurement
	Strength of Materials III
	System Design
	Practical English for Mechanical Engineering I
	Manufacturing Processes II
	Ferrous Metallurgy
	Analytical Engineering of Materials
	Fluids Engineering II
	Nonferrous Metals
	Mechanical Vibrations
	Introduction to Programming
	Applied Mathematics III
	Applied Physics II
	Metallurgical Engineering
	Heat Transfer Engineering
	Thermodynamics of Materials
	Mechanical Elements and Designing
	Internship
	Control Engineering I
	Materials Properties I
	Practical English for Mechanical Engineering II
	Environmental Strength I
	Simulation Engineering
	Production and Quality Management
	Applied Mathematics IV
	Vibrational Engineering
	Materials Properties II
	Environmental Strength II
	Organic Materials
	Fluid Machine Technology
	Heat Engine Technology
	Control Engineering II
	Fundamentals of Static and Fatigue Design
	Manufacturing Processes III
	Applied Programming
	Deformation and Fracture of Materials
	Advanced Lecture of Mechanical Engineering
	Presentation in English

## Department of Electrical and Control Systems Engineering

### Department of Electrical and Control Systems Engineering

#### Educational objectives

To develop engineers who comprehensively acquire electrical, mechanical and information technology engineering and can creatively develop new technologies.

To develop engineers who integrate specialized knowledge focusing on electricity and machinery that are the pillars of engineering.

To develop engineers who acquire the ability to think based on electrical and mechanical engineering and can carry out "manufacturing" based on mathematics, physics and chemistry.



## Curriculum

Classification	Subjects
Required Subjects	Fundamental Experiments for Manufacturing Engineers
	Introduction to Ethics for Engineers
	Fundamentals of Information Technology
	Introduction to Electrical Engineering
	Fundamental Information Technology
	Technical Design and Drawing I
	Manufacturing Engineering
	Fundamental Experiment for Engineering
	Experiments on System Engineering I
	Experiments on System Engineering II
	Introduction to Graduation Research
	Experiments on System Engineering III
	Graduation Research
Elective Subjects	Applied Physics I
	Electromagnetism I
	Electric Circuit I
	Electronic Circuit I
	Computer Science
	Technical Design and Drawing II
	Industrial mechanics
	Fundamentals of Mechatronics
	Instrumentation Engineering I
	Applied Mathematics I
	Applied Mathematics II
	Applied Mathematics III
	Applied Physics II
	Applied Physics III
	Technical English I
	Electromagnetism II
	Electromagnetism III
	Electric Circuit II
	Electric Circuit III
	Electric Machine I
	Electronic Circuit II
	Electronic Circuit III
	Computer Systems I
	Computer Systems II
	Control Engineering I
	Control Engineering II
	Fluid Dynamics I
	Thermodynamics I
	Manufacturing Processes
	Strength of Materials I
	Strength of Materials II
	Mechatronics Creative Design
	Internship
	Applied Mathematics IV
	Technical English II
	Electrical Engineering Materials
	Electric Machine II
	Power Electronics
	Electronics I
	Electronics II
	Communication Engineering
	Instrumentation Engineering II
	Control Engineering III
	Simulation Engineering
	System Engineering
	Robotics I
	Robotics II
	Dynamics of Machinery I
	Dynamics of Machinery II
	Fluid Dynamics II
	Thermodynamics II
	Computer Aided Design and Manufacturing
	Material Engineering
	Presentation in English

## Department of Applied Chemistry and Chemical Engineering

### Department of Applied Chemistry and Chemical Engineering

#### Educational objectives

To develop engineers who have knowledge focusing on a wide range of fields such as nanomaterials, functional materials, polymeric materials and eco-technology and having a deep knowledge of the most advanced technology based on chemistry and biochemistry.

To develop engineers who have the ability to plan and carry out the development and improvement of environment-friendly, organic / inorganic materials and energy-related materials and environmental protection technologies and the high ethical standards for engineers.

To develop engineers who can contribute to the development of chemical / pharmaceutical industries and the polymeric industry that are significant locally, protect and improve the building of a sustainable society and the Sea of Japan Rim Region environment.



## Curriculum

Classification	Subjects
Required Subjects	Fundamental Experiments for Manufacturing Engineers
	Introduction to Ethics for Engineers
	Fundamentals of Information Technology
	Experiments in Analytical Chemistry
	Experiments in Organic Chemistry
	Experiments in Inorganic Chemistry
	Experiments in Physical Chemistry
	Presentation-oriented Experiments
	Experiments in Chemical Engineering
	Experiments in Biochemistry
	Introduction to Graduation Research
	Graduation Research
Elective Subjects	Organic Chemistry I
	Organic Chemistry II
	Inorganic Chemistry I
	Analytical Chemistry I
	Biology
	Computer Programming I
	Organic Chemistry III
	Analytical Chemistry II
	Basic Chemical Engineering
	Outline of Biochemistry
	Inorganic Chemistry II
	Inorganic Chemistry III
	Physical Chemistry I
	Computer Programming II
	Applied Mathematics I
	Applied Mathematics II
	Applied Physics I
	Applied Physics II
	Organic Chemistry IV
	Organic Chemistry V
	Inorganic Chemistry IV
	Chemical Engineering I
	Chemical Engineering II
	Biochemistry I
	Biochemistry II
	Physical Chemistry II
	Physical Chemistry III
	Materials Engineering I
	Instrumental Analysis I
	Experiments in Instrumental Analysis
	English for Chemistry
	Polymer Chemistry I
	Molecular Biology
	Genetic Engineering
	Internship
	Chemical Reaction Engineering
	Advanced Chemistry I
	Advanced Chemistry II
	Materials Engineering II
	Applied Physics III
	Applied Physics IV
	Industrial Organic Chemistry
	Industrial Inorganic Chemistry
	Polymer Chemistry II
	Chemical Engineering III
	Applied Microbiology
	Pharmacology
	Advanced Instrumental Analysis
	Eco-materials
	Instrumental Analysis II
	Computer-Aided Design
	Quality Control
	Safety Engineering
	Environmental Science
	Biocatalytic Engineering
	Presentation in English

## Department of Electronics and Computer Engineering

### Department of Electronics and Computer Engineering

#### Educational objectives

To develop engineers who can design and develop a comprehensive program from systems to application.

To develop engineers who can design electronic circuits from sensors to interface.

To develop engineers who can design a network to organically connect programs and circuits.



## Curriculum

Classification	Subjects
Required Subjects	Fundamental Experiments for Manufacturing Engineers
	Introduction to Ethics for Engineers
	Fundamentals of Information Technology
	Fundamentals of Electricity I
	Fundamentals of Electricity II
	Computer Systems
	Logic Circuits
	Programming I
	Programming II
	Seminars in Engineering I
	Experiments on Electronic and Computer Engineering I
	Experiments on Electronic and Computer Engineering II
	Experiments on Electronic and Computer Engineering III
	Graduation Research
Elective Subjects	Applied Physics I
	Applied Physics II
	Electric Circuits I
	Electric Circuits II
	Electronic Circuits I
	Electronic Circuits II
	Programming III
	Computer Structure I
	Computer Structure II
	Algorithm and Data Structure I
	Algorithm and Data Structure II
	Discrete Mathematics I
	Seminars in Engineering II
	Applied Mathematics I
	Applied Mathematics II
	Applied Physics III
	Applied Physics IV
	Electromagnetism I
	Electromagnetism II
	Electric Circuits III
	Semiconductor Devices
	Electronic Systems I
	Electronic Systems II
	Electrical Communication Engineering I
	Electrical Communication Engineering II
	Communication Systems I
	Communication Systems II
	Operating System I
	Operating System II
	Control Engineering I
	Control Engineering II
	Numerical Computation
	Discrete Mathematics II
	Creative Engineering Design I
	Creative Engineering Design II
	Internship
	Applied Mathematics III
	Applied Mathematics IV
	Technical English
	Sensor Engineering
	Digital Signal Processing I
	Digital Signal Processing II
	Electronic Circuits III
	Electronic Circuits IV
	Computer-Based Measurement Systems I
	Computer-Based Measurement Systems II
	Electromagnetic Wave Engineering
	Applied Electromagnetic Systems
	Computer Networks I
	Computer Networks II
	Software Engineering I
	Software Engineering II
	Media Engineering I
	Media Engineering II
	Computer Engineering I
	Computer Engineering II
	Information Theory
	English Presentation



## Department of International Business

### Department of International Business Educational objectives

To develop human resources who acquire specialized knowledge focusing on business and can utilize such knowledge.

To develop business persons who have language skills in English and other foreign languages (Chinese, Korean or Russian) and the ability to understand cross-culturally.



## Curriculum

Classifi- cation	Subjects
Required Subjects	Introduction to Commerce I
	Introduction to Commerce II
	Information Literacy I
	Information Literacy II
	Computer Literacy I
	Introduction to Logistics I
	Introduction to Logistics II
	Introduction to Accounting I
	Introduction to Accounting II
	Introduction to Economics I
	Introduction to Economics II
	English Workshop I
	English Workshop II
	Introduction to Law I
	Introduction to Law II
	Introduction to Management I
	Introduction to Management II
	Socio-Economic History of Japan Sea Rim I
	Socio-Economic History of Japan Sea Rim II
	Business Seminar I
	Business Seminar II
	Graduation Thesis
	Information Literacy III
	Information Literacy IV
	Computer Literacy II
	Logistics Management I
	Logistics Management II
Elective Subjects	Financial Accounting I
	Financial Accounting II
	Manufacturing Accounting I
	Manufacturing Accounting II
	Chinese Workshop I
	Korean Workshop I
	Russian Workshop I
	Chinese Workshop II
	Korean Workshop II
	Russian Workshop II
	Marketing I
	Marketing II
	International Logistics I
	International Logistics II
	Managerial Accounting I
	Managerial Accounting II
	Civil Law I
	Civil Law II
	Strategic Management I
	Strategic Management II
	Management Information I
	Management Information II
	Socio-Economic History of the Japan Sea Rim III
	Socio-Economic History of the Japan Sea Rim IV
	Business English
	Current English Reading
	Chinese Workshop III
	Korean Workshop III
	Russian Workshop III
	Chinese Expression I
	Korean Expression I
	Russian Expression I
	Chinese Expression II
	Korean Expression II
	Russian Expression II
	Chinese Expression III
	Korean Expression III
	Russian Expression III
	Finance and Insurance Theory I
	Finance and Insurance Theory II
	Internship
	International Business I
	International Business II
	Marketing Strategy
	Target Costing I
	Target Costing II
	Business English Workshop I
	Business English Workshop II
	An Introductory Course in Cross-cultural Studies
	Business Chinese
	Business Korean
	Business Russian
	Current Chinese
	Current Korean
	Current Russian
	Employment Law I
	Employment Law II
	Management & Administration I
	Management & Administration II
	Management Science I
	Management Science II
	An Introductory Course in International Relations I
	An Introductory Course in International Relations II
	Overseas Program in English Speaking Countries
	Overseas Program in the Japan Sea Rim
	English Presentation

## Department of Maritime Technology

### Educational objectives

To have students acquire specialized knowledge necessary as a vessel specialist.

To develop professional abilities through experiments and practical training for control and construction of systems in the maritime field.

To have students acquire a code of etiquette and seamanship necessary for good operation of vessel systems through practical training and discipline.

To develop knowledge, skills and the basis of management skills for development of professional applied skills.



## Curriculum

Classification		Subjects
Common Subjects in Both Courses	Required Subjects	Introduction to Marine Engine I Introduction to Marine Engine II Boatmanship and Signaling Introduction to Navigation I Training on Board I Electrical/Electronics Engineering I Electrical/Electronics Engineering II Maritime Safety Engineering I Maritime Safety Engineering II Electronic Circuits Electrical Equipment Naval Architecture I Naval Architecture II Maritime Laws I Maritime Laws II Instrument and Control Engineering I Instrument and Control Engineering II
	Elective Subjects	Data Processing I Applied Mathematics I Applied Mathematics II Internship General Oceanography Special Lecture of Naval Architecture Nautical Science Special Lecture on Maritime Laws Hull Construction Special Lecture of Navigation Special Lecture on Control System Navigation Techniques Special Lecture of Electrical/Electronics Engineering Special Lecture of Steam Engineering Production System Engineering Heat Engine Engineering I Heat Engine Engineering II Heat Transfer Advanced Engineering Materials Practical Marine Engine System Oral presentation
Nautical Science Course	Required Subjects	Introduction to Navigation II Lecture on Nautical Positioning I Maritime English I (Navigation) Training on Seaman Ship I Training on Seaman Ship II Training on Board I Lecture on Nautical Positioning II Lecture on Nautical Positioning III Lecture on Nautical Instruments I Hull Management I Hull Management II Maritime Traffic Law I Practical Exercises and Experiments I Training on Board III Lecture on Nautical Positioning IV Lecture on Nautical Instruments II Ship Maneuverability Marine Meteorology I Marine Meteorology II Shipping Business and Economics I Shipping Business and Economics II Maritime Traffic Law II Practical Exercises and Experiments II Training on Board IV Lecture on Navigation System Maritime English II (Navigation) Exercises in Mercantile Science Graduation Thesis
	Elective Subjects	Navigation Mechanics I Navigation Mechanics II Data Processing II Mercantile Marine Business Navigation Seminar I International Logistics Applied Navigation Mechanics I Applied Navigation Mechanics II Navigation Seminar II Navigation Seminar III Maritime Laws III Practical Marine Engine System Maritime English for Engineer I Manufacturing Practice Mechanics I Mechanics II
Marine Engineering Course	Required Subjects	Training on Board II Internal Combustion Engine Engineering I Internal Combustion Engine Engineering II Industrial Thermodynamics I Industrial Thermodynamics II Strength of Materials I Strength of Materials II Data Processing II Practical Exercises and Experiments I Training on Board III Internal Combustion Engine Engineering III Internal Combustion Engine Engineering IV Steam Engineering I Steam Engineering II Auxiliary Machinery I Auxiliary Machinery II Power Electronics I Power Electronics II Engineering Materials I Mechanical Drawing I Mechanical Drawing II Fluid Mechanics I Fluid Mechanics II Practical Exercises and Experiments II Training on Board IV Steam Engineering III Engineering Materials II Maritime English for Engineer II Graduation Thesis
	Elective Subjects	Introduction to Navigation II Exercises in Mercantile Science Maritime Traffic Law I Practical Skills in Mercantile Business Engineering Seminar Navigational Modern Seamanship

# Department of General Education

## Curriculum

### 4 Departments of Engineering

Classification	Subjects
Required Subjects	Natural Science
	Fundamental Mathematics A I Fundamental Mathematics A II Fundamental Mathematics B I Fundamental Mathematics B II Physics I Chemistry I Fundamental Science Experiment
Elective Subjects	Social Science and Humanity
	Comprehensive Japanese I A Comprehensive Japanese I B Comprehensive Japanese II Comprehensive Japanese III Japanese Expression Japanese Language and Culture History I History II Historical Science I Historical Science II Ethics Philosophy I Philosophy II Politics & Economics Economics I Economics II Law
	Natural Science
	Fundamental Mathematics C Calculus I Calculus II Linear Algebra I Linear Algebra II Mathematical Analysis I Mathematical Analysis II Comprehensive Mathematics Probability and Statistics Advanced Mathematics I Advanced Mathematics II Physics I *1 Physics II Physics III Chemistry I *2 Chemistry II Health Education Physical Education I Physical Education II Physical Education III Physical Education IV Physical Education V
	H & P Education *3
	Art
	Music Arts Calligraphy
	Foreign Language
	Comprehensive English I Comprehensive English II Comprehensive English III Comprehensive English IV Comprehensive English V English Expression I English Expression II English Expression III English Conversation I English Conversation II English Conversation Practicum I English Conversation Practicum II English Practicum I English Practicum II English Practicum III Chinese I Korean I Russian I Chinese II Korean II Russian II Chinese III Korean III Russian III
	Other
	Cross-cultural Training For The English-Speaking World Cross-cultural Training For Japan Sea Rim

## Curriculum

### Department of International Business

Classification	Subjects
Required Subjects	Social Science and Humanity
	Comprehensive Japanese I A Comprehensive Japanese I B Comprehensive English I Comprehensive English II Comprehensive Japanese II Comprehensive Japanese III Japanese Expression Japanese Language and Culture History I History II Historical Science I Historical Science II Geography Ethics Philosophy I Philosophy II Politics & Economics Economics I Economics II Law
Elective Subjects	Natural Science
	Mathematics I Mathematics II Mathematics III Science I Science II
	H & P Education *3
	Physical Education I Physical Education II Physical Education III Physical Education IV Physical Education V
	Art
	Music Arts Calligraphy
	Foreign Language
	Comprehensive English III Comprehensive English IV Comprehensive English V Comprehensive English VI Comprehensive English VII English Expression I English Expression II English Conversation I A English Conversation I B English Conversation II A English Conversation II B English Conversation III English Conversation IV English Conversation V Global Literacy Chinese I Korean I Russian I Chinese II Korean II Russian II Chinese III Korean III Russian III Chinese IV Korean IV Russian IV Chinese V Korean V Russian V Chinese VI Korean VI Russian VI
	Other
	Linguistics I Linguistics II

## Curriculum

### Department of Maritime Technology

Classification	Subjects
Required Subjects	Natural Science
	Fundamental Mathematics A I Fundamental Mathematics A II Fundamental Mathematics B I Fundamental Mathematics B II Physics I
Elective Subjects	Social Science and Humanity
	Comprehensive Japanese I A Comprehensive Japanese I B Comprehensive Japanese II Comprehensive Japanese III Japanese Expression History I History II Historical Science I Historical Science II Geography Ethics Philosophy I Philosophy II Politics & Economics Economics I Economics II Law
	Natural Science
	Calculus I Calculus II Linear Algebra I Linear Algebra II Mathematical Analysis I Mathematical Analysis II Probability and Statistics Comprehensive Mathematics Advanced Mathematics I Advanced Mathematics II Physics II Physics III Chemistry I Chemistry II
	H & P Education *3
	Physical Education I Physical Education II Physical Education III Physical Education IV Physical Education V
	Art
	Music Arts Calligraphy
	Foreign Language
	Comprehensive English I Comprehensive English II Comprehensive English III Comprehensive English IV Comprehensive English V English Expression I English Expression II English Expression III English Conversation I English Conversation II English Conversation Practicum I English Conversation Practicum II English Practicum I English Practicum II English Practicum III Chinese I Korean I Russian I Chinese II Korean II Russian II Chinese III Korean III Russian III
	Other
	Cross-cultural Training For The English-Speaking World Cross-cultural Training For Japan Sea Rim

(\*1) "Physics I" (2 credits) is a mandatory course and "Chemistry I" (2 credits) is an elective course in the Department of Mechanical Engineering, Department of Electrical and Control Systems Engineering and Department of Electronics and Computer Engineering.

"Chemistry I" (3 credits) is a mandatory course and "Physics I" (2 credits) is an elective course in the Department of Applied Chemistry and Chemical Engineering.

(\*2) "Basic Science Experiments" (1 credit) is a mandatory course in the Department of Mechanical Engineering, Department of Electrical and Control Systems Engineering and Department of Electronics and Computer Engineering.

"Basic Chemical Experiments" is not offered in the Department of Applied Chemistry and Chemical Engineering.

(\*3) Health and Physical Education

## 4. Advanced Courses

The Advanced Courses consists of engineering courses of the “ECOdesign Engineering Program” and the “Control Information Systems Engineering Program”, a humanities course of the “International Business Program,” and a maritime course of the “Maritime System Engineering Program”, which develops human resources who develop a broad education and advanced specialized knowledge.

### ■ ECOdesign Engineering Course

Guided by a philosophy that encourages us to use existing technologies to facilitate the harmony between humans and their surrounding environment, this advanced course, in addition to teaching the general engineering methods required by all engineers, will also cover environmentally conscious technologies, or “ecotechnology”. Moreover, we will nurture skilled global engineers who have an understanding of the spirit of coexistence between humans and the planet. In addition to the advanced and comprehensive fundamental academic skills mastered in the core course, we have compiled a curriculum comprised of environment-related subjects and engineering ethics. In addition, through an education program informed by project-based learning, internships, and specialized research, we will nurture creative engineers with strong development capabilities.

### ■ Control Information Systems Engineering Course

Control Information Systems Engineering Program develops professional engineers who acquire technologies for software, electricity / electronics and networks and who can design a system in which they are cooperatively coupled.

### ■ International Business Course

The International Business Program develops coordinators and project managers who have advanced technical knowledge related to business administration and practical abilities for business and who are engaged in the Sea of Japan Rim Region business.

### Curriculum

Classification	Subjects
Core Advanced Course Subjects	Instrumentation and Control
	Computer Programming
	Biotechnology
	Fundamentals of Mechanics
	Engineering Ethics
	ECOtechnology
	Environmental Engineering
	Industrial Mathematics
	Fundamentals of Management of Technology
	Internship A (Domestic Internship Program)
	Internship B (Overseas Internship Program)
	Special Topics of ECO Design Engineering
	Special Practice (Creative Engineering Project)
	Local Industry Studies
Special Advanced Course Subjects	Special Research of ECO Design Engineering I
	Special Research of ECO Design Engineering II
	Advanced Course of Materials Engineering
	Advanced Lecture of Vibration Engineering
	Advanced Simulation Engineering
	Advanced Fluid Mechanics
	Functional Materials
	Precision Machining and Manufacturing
	Advanced Lecture of Thermal Engineering
	Advanced System Designing
	Manufacturing Process
	Numerical Analysis
	Special Lectures on Electric Circuit
	Robot Engineering
	Advanced Lecture on Intellectual Signal Processing
	Energy Theory
	Electromagnetics Engineering
	Special Lectures on Power Electronics
	ECO Electric Power System
	Electronic Properties of Solids
	Thin-Film Engineering
	Advanced Lecture on Physical Chemistry
	Special Lecture on Inorganic Materials
	Composite Materials Engineering
	Advanced Polymer Materials
	Special Lecture on Functional Materials Engineering
	Advanced Lecture on Eco-materials
	Fine Organic Synthesis
	Workings of Life Substance
	Food Chemical Engineering
	Special Lecture on Instrumental Analysis

### Curriculum

Classification	Subjects
Core Advanced Course Subjects	Engineering Ethics/Business Ethics
	Technical English
	Advanced Applied Mathematics
	Advanced Applied Physics
	Seminar on Mathematics and Physics Application
	International Relations
	Advanced Business Strategy
	Information Processing
	Parameter Design
	Manufacturing System
	Internship A
	Internship B
	Seminar on Industrial Technology
	Trade Procedure in Port
	Port Logistics
	Introduction to Geoscience
	Shock Compression and Blast Wave
	Local Industry Studies
Special Advanced Course Subjects	Thesis Research I
	Thesis Research II
	Advanced Experiments
	Advanced Seminars and Exercises
	Object-oriented Programming
	Instrument and Control Programming
	Quantum Electronics
	Advanced Communication Engineering
	Physical Properties of Electronic Material
	Advanced Electromagnetic Waves
	Biological Information Engineering
	Advanced Computational Engineering
	Network System
	Intelligent Information Processing

### Curriculum

Classification	Subjects
Core Advanced Course Subjects	Engineering Ethics/Business Ethics
	Technical English
	Advanced Applied Mathematics
	Advanced Applied Physics
	Seminar on Mathematics and Physics Application
	International Relations
	Advanced Business Strategy
	Information Processing
	Information Processing
	Seminar on Industrial Technology
	Internship A
	Internship B
	Parameter Design
	Manufacturing System
	Trade Procedure in Port
	Port Logistics
	Introduction to Geoscience
	Shock Compression and Blast Wave
Special Advanced Course Subjects	Local Industry Studies
	Thesis Research I
	Thesis Research II
	Advanced Business Management I
	Advanced Business Management II
	Advanced Business Administration
	Business in Japanese Sea Rim
	Seminar on Business in Japanese Sea Rim
	Special Topics in Regional Management
	Business Creation Theory
	Special Topics in Corporate Theory
	Readings in International Business in Foreign Languages
	Firms and Employment
	Regional Innovation Theory
	Mathematical Decision Making
	Business Accounting
	Applied Information Processing
	Business and Commerce
	Data analysis of Management Systems
	Management Systems Science



## Maritime System Engineering Course

The Maritime System Engineering Program develops human resources who can play a role for system creation to connect lands and ships for new logistics, new transportation systems and new plants, based on in-depth and systematic learning.

### Curriculum

Classification	Subjects
Core Advanced Course Subjects	Engineering Ethics/Business Ethics
	Technical English
	Advanced Applied Mathematics
	Advanced Applied Physics
	Seminar on Mathematics and Physics Application
	International Relations
	Advanced Business Strategy
	Information Processing
	Parameter Design
	Manufacturing System
	Internship A
	Internship B
	Seminar on Industrial Technology
	Trade Procedures in Port
	Port Logistics
	Introduction to Geoscience
	Shock Compression and Blast Wave
	Local Industry Studies
Special Advanced Course Subjects	Thesis Research I
	Thesis Research II
	Advanced Experiments
	Advanced Seminars and Exercises
	Ship Control System
	Navigation System
	Vehicle Design
	Marine Environmental and Information Technology
	Advanced Heat Engine Engineering
	Steam and Gas Turbines for Marine Propulsion
	Special Topics in Maritime Safety
	Advanced Fluid Engineering
	Marine Labor Law
	Advanced Heat Transfer

## General Education

### ECODESIGN Engineering Course

Classification	Subjects
General Education	Japanese Language and Culture
	History and Culture
	Thought and Culture
	Environmental Sociology
Foreign Language	English I
	English II
	English Communication I
	English Communication II

### Control Information Systems Engineering Course

Subjects
Advanced English Practicum I
Advanced English Practicum II
Advanced English Workshop
Japanese Language and Literature
Regional Studies
Health Science
Industrial Society
Culture Studies of Japan Sea Rim Countries

### International Business Course

Subjects
Advanced English Practicum I
Advanced English Practicum II
Advanced English Workshop
Japanese Language and Literature
Regional Studies
Health Science
Industrial Society
Culture Studies of Japan Sea Rim Countries

### Maritime System Engineering Course

Subjects
Advanced English Practicum I
Advanced English Practicum II
Advanced English Workshop
Japanese Language and Literature
Regional Studies
Health Science
Industrial Society
Culture Studies of Japan Sea Rim Countries

## 5. Faculty Members List

### Department of Mechanical Engineering

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	ASAJI Toyohisa	Practice of Engineering Mechanics
Professor	Ph.D.	INOUE Makoto	Nonferrous Metals
Professor	Ph.D.	OKANE Masaki	Strength of Materials
Professor	Ph.D.	SASE Naoki	Mechanical Elements and Designing
Professor	Ph.D.	SHIRAKAWA Hidemi	Fluids Engineering
Professor	Ph.D.	TAKAHASHI Katsuhiko	Metallurgical Engineering
Professor	Ph.D.	TERANISHI Tsunenobu	Heat Transfer Engineering
Associate Professor	Ph.D.	IKEDA Hidetoshi	Robotics II
Associate Professor	Ph.D.	KITA Masao	Fundamentals of Materials Science and Engineering
Associate Professor	M.S.	MASUYAMA Keiichi	Fundamentals of Mechanical Drawing
Associate Professor	Ph.D.	SAKAMOTO Yoshinori	Environmental Strength II
Associate Professor	Ph.D.	TOSHIMA Takeshi	Materials Properties II
Associate Professor	Ph.D.	YOSHIKAWA Fumie	Mechanical Engineering Measurement
Assistant Professor	Ph.D.	TAJIRI Tomoki	Control Engineering

### Department of Electrical and Control Systems Engineering

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	MOMOSE Noboru	Fundamentals of Mechatronics
Professor	Ph.D.	NISHI Toshiyuki	Electromagnetism I
Professor	Ph.D.	SAKURAI Yutaka	Electrical Engineering Materials
Professor	Ph.D.	SATO Keisuke	Electric Machine I , II
Professor	Ph.D.	SHIBATA Hiroshi	Strength of Materials I , II
Professor	Ph.D.	TAKADA Eiji	Instrumentation Engineering
Associate Professor	Ph.D.	FUJISAKI Akihiro	Applied Physics I , II
Associate Professor	M.S.	FURUKAWA Hiroto	Electric Circuit I · II
Associate Professor	Ph.D.	ISHIDA Fumihiko	Fundamental Information Technology
Associate Professor	Ph.D.	IZAWA Masaki	System Design
Associate Professor	Ph.D.	KANEKO Shin-ichiro	Robotics I
Associate Professor	Ph.D.	TADA Kazuhiro	Electronic Circuit I
Assistant Professor	Ph.D.	KITAMURA Takuya	Control Engineering II
Assistant Professor	Ph.D.	NISHIJIMA Kenichi	Power Electronics
Professor	Ph.D.	NISHIDA Hitoshi	Fluid Engineering

### Department of Applied Chemistry and Chemical Engineering

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	GOTO Michimasa	Biochemistry I
Professor	Ph.D.	KAWAFUCHI Hiroyuki	Organic Chemistry IV
Professor	Ph.D.	KAWAI Takae	Physical Chemistry I
Professor	Ph.D.	TAFU Masamoto	Eco-materials
Professor	Ph.D.	TAKAHIRO Masahiko	Applied Physics I
Professor	Ph.D.	TSUMORI Nobuko	Chemistry
Associate Professor	Ph.D.	MANAKA Atsushi	Experiments in Analytical Chemistry
Associate Professor	Ph.D.	MINEMOTO Yasumasa	Applied Mathematics I
Associate Professor	Ph.D.	MORI Yasutaka	Polymer Chemistry
Associate Professor	Ph.D.	NAKAJIMA Eiji	Basic Chemical Engineering
Associate Professor	Ph.D.	SHINOZAKI Yukiko	Molecular Biology
Lecturer	Ph.D.	TAKAMATSU Saori	Analytical Chemistry II
Assistant Professor	Ph.D.	FUKUDA Tomohiro	Organic Chemistry I
Assistant Professor	Ph.D.	SAKONO Naomi	Physical Chemistry II
Assistant Professor	Ph.D.	YAMAGISHI Masakazu	Organic Chemistry I
Professor	Ph.D.	YASUDA Kensei	Inorganic chemistry

## Department of Electronics and Computer Engineering

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	ASO Tsukasa	Communication Systems
Professor	Ph.D.	FURUYAMA Shoichi	Computer Engineering
Professor	Ph.D.	MIZUMOTO Iwao	Electrical Communication
Professor	Ph.D.	OGUMA Hiroshi	Digital Signal Processing
Professor	Ph.D.	SHINA Toru	Electromagnetism
Professor	Ph.D.	SHINOKAWA Toshiyuki	Computer Structure
Professor	Ph.D.	TSUKADA Akira	Electric Circuits
Associate Professor	Ph.D.	AKIGUCHI Syunsuke	Operating System
Associate Professor	M.S.	HAYASE Yoshikazu	Discrete Mathematics
Associate Professor	Ph.D.	MATOBAY Ryuichi	Applied Mathematics
Associate Professor	M.S.	YAMAGUCHI Akifumi	Electronic System
Associate Professor	Ph.D.	YOSHII Yotsumi	Applied Physics
Research Associate	M.S.	KADOMURA Hideki	Experiments on Computer Engineering
Professor	Ph.D.	SHINKAI Junko	Algorithm and Data Structure

## Department of International Business

Status	Academic Credentials	Name	Subject
Professor	M.A.	HASEGAWA Hiroshi	Financial Accounting
Professor	Ph.D.	MIYASHIGE Tetsuya	Strategic Management
Professor	Ph.D.	NISHIHARA Masahiro	An Introductory Course in Cross-cultural Studies
Associate Professor	M.A.	EBIHARA Tsuyoshi	Business Chinese
Associate Professor	Ph.D.	HAGIWARA Shingo	Management Information
Associate Professor	Ph.D.	KIYOSHI Takeharu	Introduction to Economics
Associate Professor	M.A.	OKAMOTO Katsunori	Socio-economic History of the Japan Sea Rim
Associate Professor	M.A.	MATSUBARA Yoshihiro	Employment Law
Associate Professor	Ph.D.	MIYAZAKI Izumi	Business Russian
Associate Professor	Ph.D.	MURAYAMA Masako	Logistics Management
Lecturer	Ph.D.	NASUNO Ikuhiro	Introduction to Commerce
Lecturer	Ph.D.	SHIOMI Kosuke	Management Accounting

## Department of Maritime Technology

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	HOMAE Tomotaka	Mechanics
Professor	Ph.D.	KAWAI Msashi	Positioning System
Professor	Ph.D.	MIZUTANI Junnosuke	Engineering Materials
Professor	Ph.D.	NAKATANI Toshihiko	Introduction to Navigation
Professor	M.A.	SASAYA Keiji	Maritime Safety Engineering
Professor	Ph.D.	TOGA Shinji	Applied Navigation Mechanics
Professor	Ph.D.	YAMAMOTO Keiichiro	Power Electronics
Associate Professor	Ph.D.	KYODEN Tomoaki	Industrial Thermodynamics
Associate Professor	A.S.	MATSUMURA Shigemi	Steam Turbine / Gas Turbine
Associate Professor	Ph.D.	MUKOSE Kiichiro	Naval Architecture
Lecturer	Ph.D.	FUKUDOME Ken-ichi	Marine Meteorology
Assistant Professor	M.S.	NISHII Noriko	Maritime Traffic Law
Assistant Professor	Ph.D.	YAMADA Keisuke	Internal Combustion Engine Engineering
Assistant Professor	A.S.	NOMURA Makoto	Maritime English for Engineer

### School Training Ship WAKASHIO-MARU

Status	Academic Credentials	Name	Subject
Captain	A.S.	NAKAMATSU Hideya	Training on Board
Chief Engineer	Ph.D.	YAMATANI Naohiro	Training on Board
Chief Officer	A.S.	KANAYAMA Emi	Training on Board
First Engineer	A.S.	HINOTANI Ryoichi	Training on Board

## Department of General Education

[Hongo campus]

Status	Academic Credentials	Name	Subject
Professor	M.A.	AOYAMA Akiko	English Expression I
Professor	Ph.D.	ADACHI Mayuko	Comprehensive Japanese
Professor	Ph.D.	HASEGAWA Takayuki	Advanced Mathematics
Professor	M.A.	HIBI Naohiro	Physical Education
Professor	B.A.	TAKAKUMA Tetsuya	Comprehensive Japanese
Professor	M.A.	TOMITA Takashi	Comprehensive English III
Professor	M.A.	MIYAZAKI Shinya	Philosophy I
Professor	Ph.D.	YAMAKOSHI Hitoshi	Physics
Associate Professor	M.S.	KAWAHARA Osamu	Mathematical Analysis
Associate Professor	M.S.	MORITA Yasufumi	Genetic Engineering
Associate Professor	M.A.	TAKAGOSHI Yoshikazu	Comprehensive English II
Lecturer	M.A.	KAMIYA Satoshi	English Expression I , II
Lecturer	Ph.D.	KASATANI Masahiro	Fundamental Mathematics AI, All
Assistant Professor	M.A.	NIKI Yasuhiro	Physical Education
Assistant Professor	Ph.D.	YOKOYAMA Kyoko	History

[Imizu campus]

Status	Academic Credentials	Name	Subject
Professor	Ph.D.	HOSHINO Akemi	Chinese Language
Professor	M.S.	KAWAI Hitoshi	Mathematical Analysis
Professor	M.A.	OKABE Hiroko	Comprehensive Japanese
Professor	Ph.D.	TERASAKI Yukiko	Chemistry
Professor	M.A.	YOKOTA Kazuhiro	Regional Studies
Associate Professor	M.A.	CHARLTON Bill Moananu	English for International Communication
Associate Professor	M.A.	COOPER Todd	English for Business and Commerce
Associate Professor	M.A.	KONDO Shugo	Comprehensive Japanese
Associate Professor	Ph.D.	OHTAKE Yukiko	Physics
Associate Professor	M.A.	OHASHI Chisato	Physical Education
Associate Professor	M.A.	RAKUYAMA Susumu	Comprehensive English I , II , V
Associate Professor	Ph.D.	SAKURAI Hideto	Mathematics
Associate Professor	M.A.	YAMAMOTO Yuki	Russian Language
Lecturer	M.A.	YAMAMURA Hiroto	Comprehensive English
Assistant Professor	M.A.	HAYASHI Naoto	Physical Education I , II

## Center

Center for Collaborative Solution

Status	Academic Credentials	Name	Subject
Professor	B.S.	URAKAZE Kazuhiro	Dynamics of Machinery II
Lecturer	Ph.D.	ISHIGURO Minoru	Simulation Engineering
Assistant Professor	Ph.D.	YAMAMOTO Hisashi	Fluid Dynamics

Center for Promotion and Advancement of Research

Status	Academic Credentials	Name	Subject
Associate Professor	Ph.D.	OTA Takao	Engineering Mechanics
Lecturer	Ph.D.	ITO Nao	Electronic Circuits



## 6. Center for Collaborative Solution

Center for Collaborative Solution seeks to accelerate industry-academia collaboration in the local community and solve technical problems faced by local industry by leveraging the research results and practical technical development capabilities of our faculty members in partnership with companies and local governments, as well as to contribute to the inheritance and development of local technical capabilities and personnel development, which is first and foremost among the students who will play a leading role in inheritance and development. Through these endeavors, the Center has been established to contribute to the revitalization of the local community.

Toyama Prefecture, where our school is located, is the largest industrial prefecture on the coast of the Sea of Japan. Our Center has been promoting stronger industry-academia and regional collaborations that take optimum advantage of this local environment. More specifically, we are working to provide technical consultations for local industry and promote support for engaging in joint and contract-based research, as well as the planning and implementation of cooperative teaching projects with enterprises and communities. We are also promoting initiatives that can provide a one-stop shop for partnership with local communities, up to and including the management and utilization of intellectual property obtained through joint research projects. To promote these projects, we have assigned on-campus coordinators to engage at a detailed level by identifying the needs of local industry and matching these with the “seeds” on offer at our school.

In addition, in cooperation with member companies on the Technology Promotion Association, we are also working to strengthen partnerships with local industry.

Through these initiatives, we aim to continue to expand our school's teaching and research along with local industry.



Lecturing to a study group



Sharing opinions through visits to private companies

## 7. Center for Promotion and Advancement of Research

At the Center for Promotion and Advancement of Research, we aim to advance our school's research and teaching by enhancing the research capabilities of our faculty members and channeling these back into educational practice. For this purpose, we are actively arranging Special Lectures and International Seminars (e.g., our Research Promotion Lecture Series and Research Promotion Forum), in which we invite lecturers from partner organizations in Japan as well as from overseas. By having our faculty members and advanced course students give presentations about their research, we are deepening partnerships between our own school and other research institutes and universities, cultivating an atmosphere of engagement in state-of-the-art research and development.

Furthermore, since 2017, our school has been designated as a Research Promotion Model College, and in addition to supporting high-level research with the establishment of a Priority Research Division, we are promoting partnerships with other universities and *kōsen*.

Conceptualizing teaching and research as being two sides of the same coin, we will continue to promote activities that will serve the advancement of both in the future.



Presenting lectures at the International Forum on Research Promotion



Poster presentations by advanced course students

## 8. Center for International Education and Research

With globalization, we are being forced to transform the social systems that we have built in the past. Japanese firms are promoting globalization in response to declining domestic levels of demand and changes in the international situation. It is becoming a matter of course to expand business into emerging economies showing remarkable economic development and to open up undeveloped overseas markets. It has become essential to set up and operate offices and manufacturing bases overseas. Personnel who will play a leading role in the local community from a global perspective are therefore needed.

In response to these changed circumstances, colleges of technology across Japan have started devoting more effort to the cultivation of a cosmopolitan internationalism, on top of their traditional engagement with the training of creative engineers and businesspeople. This is an attempt by *kōsen* to train global personnel who are able to understand and engage in two-way communication with foreign nationals with different cultural backgrounds, who are able to cooperate while still asserting themselves clearly, and who can contribute to the development of a sustainable society. Naturally, at our school as well, we are implementing various activities in an attempt to train engineers and businesspeople who can confront urgent challenges head on, as befits the leaders of tomorrow.

Our International Education Center was established and is engaging in our own ambitious initiatives as an anchor organization supporting these types of activities. We are promoting the further internationalization of teaching and research with the objectives of training students with a global perspective, as well as the communication skills and cosmopolitan character that will stand them in good stead in the international community, and of cultivating a cosmopolitan character among our faculty members. We are actively improving our language education capabilities and accepting short-stay international students, as well as supporting language study and overseas internships for Japanese students. Furthermore, in partnership with local companies and overseas universities with whom we have signed international academic exchange agreements, we are also promoting the organization of international symposia and the implementation of international research collaborations. At the Center, it is our desire to contribute to the creation of highly specialized personnel who have an international perspective while remaining rooted in the local community.



Visits by short-stay international students from Thailand and Singapore

## 9. Facilities

### Library and Information Center

#### Library

Libraries are located on both the Hongō and Imizu Campuses, supporting learning, teaching, and research on the part of our students and faculty members.

The Hongō Library contains a collection of approximately 77,000 books and 850 periodicals, primarily in the fields of science and engineering, while the Imizu Library contains approximately 80,000 books and 970 periodicals, primarily in the fields of mercantile marine, digital information, and international business. In addition to specialty texts in each of these fields, users can also find reading material in a wide range of disciplines, including books for extensive reading in English and workbooks to practice for qualifying examinations for employment or further study, as well as DVDs and other audiovisual materials. In addition, the libraries are set up to allow users to access academic databases and electronic journals via on-campus computers.

These libraries are also open to the general public.

Library Hours

	Hongo Library	Imizu Library
Academic Period	Mon. – Fri. 8:30–21:00	Mon. – Fri. 8:30–19:00
	Sat. 10:00–15:00 During examination period 10:00–17:00	Sat. 13:00–17:00
Vacation Period	Mon. – Fri. 8:30–17:00	Mon. – Fri. 8:30–17:00
	Closed on Sat.	Closed on Sat.

#### Information Center

The Information Center is located on the Hongō Campus and Imizu Campus, and offers introductory education and advanced professional education on information processing education, support for research of teachers and students and job performance of teaching staff, etc., network environments and information services.

The center also has 7 seminar rooms in total at both campuses as shared facilities, and administers more than 300 PC terminals, an internal network and external network (SINET).

The Information Center is available after class as well, and students from all departments take advantage of the Internet, e-mail, application software for submission of assignments, and graduation work.

#### Hongo Campus



Library Reading Room

#### Imizu Campus



Library Reading Room

### Marine Training and Research Center, Training Ship “Wakashio Maru”

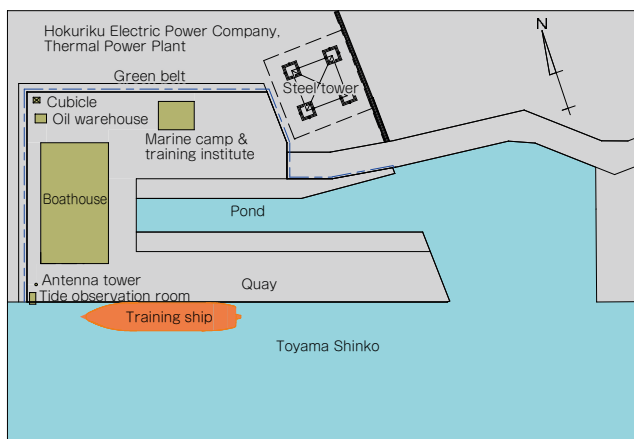
#### Imizu Campus

#### Marine Training and Research Center(6-4, Horiesengoku, Imizu City)

In March 2015, the center was relocated to a newly built site (6-4, Horiesengoku, Imizu City) 3 kilometers away from Imizu Campus. The center is located on the north side of the east end of Toyama Shinko Port (within the Fushiki-Toyama Port, Shinminato District), and the entrance is near the Nakanoguchi Intersection on Route 415. The site area is 11,232m<sup>2</sup>. Buildings include a boathouse, marine camp & training institute, oil warehouse and tide observation room, equipment such as antenna tower, overhead traveling crane, 150m dedicated quay (the training ship “Wakashio Maru” is moored there), pond and floating dock.

The center is mainly used for practical training conducted by the Department of Maritime Technology, the campus-wide cutter race competition, and extracurricular programs including the yacht club and the boat club (cutter club). The center is also used for extension lectures open to local youth and citizens and for research and study by companies and research institutes, etc.

The boathouse includes lecture rooms and technique & work rooms. Also observation equipment for experiments and research, models necessary for maritime education, lifeboats, yachts, cutters (small boats) and other related equipment are stored and used here.



Layout of Marine Training and Research Center

# 10. School Life

## ■ Academic Calendar (2015 Academic Year)

<b>April:</b>	<ul style="list-style-type: none"> <li>• Entrance Ceremony</li> <li>• Club Recruitment (Organized by Student Council)</li> <li>• Freshman Orientation</li> </ul>	<b>August:</b>	<ul style="list-style-type: none"> <li>• Summer Vacation (through end of September)</li> <li>• All Japan Technical Colleges Athletic Meet</li> </ul>	<b>December:</b>	<ul style="list-style-type: none"> <li>• Vocational Guidance</li> <li>• Winter Vacation (through early January)</li> </ul>
<b>May:</b>	<ul style="list-style-type: none"> <li>• Freshmans' Overnight Study Camp</li> <li>• Intramural Ball Sports Day</li> </ul>	<b>September:</b>	<ul style="list-style-type: none"> <li>• Graduation Ceremony – Department of Maritime Technology</li> </ul>	<b>January:</b>	<ul style="list-style-type: none"> <li>• Vocational Guidance</li> <li>• Recommendation Entrance Examination</li> </ul>
<b>June:</b>	<ul style="list-style-type: none"> <li>• Interscholastic Athletic Meet</li> <li>• First-Semester Mid-term Examinations</li> </ul>	<b>October:</b>	<ul style="list-style-type: none"> <li>• Factory Tours (fourth-year students)</li> <li>• Tokai-Hokuriku District Robot Contest</li> <li>• Vocational Guidance</li> </ul>	<b>February:</b>	<ul style="list-style-type: none"> <li>• General Entrance Examination</li> <li>• Final Examinations</li> <li>• Thesis Presentations</li> </ul>
<b>July:</b>	<ul style="list-style-type: none"> <li>• Hokuriku District Technical Colleges Athletic Meet</li> <li>• Cutter Race Competition</li> <li>• First-Semester Final Examinations</li> </ul>	<b>November:</b>	<ul style="list-style-type: none"> <li>• School Festival</li> <li>• Industry Research Workshop</li> <li>• Second-Semester Mid-term Examinations</li> </ul>	<b>March:</b>	<ul style="list-style-type: none"> <li>• Graduation Ceremony</li> </ul>

## ■ Club Activities

Hongo Campus		Imizu Campus	
Athletic Team Clubs	Cultural Clubs	Athletic Team Clubs	Cultural Clubs
Track and Field	Brass Band	Yachting	School Newspaper
Soccer	Mechatronics Technologies	Cutter	Digital Media Creation
Baseball	Sado (Tea Ceremony)	Track and Field	Brass Band
Judo	Piano	Rugby Football	Mechatronics Technologies Research
Japanese Archery	Art	Basketball	
Kendo	Popular Music	Volleyball	<b>Cultural Circles</b>
Volleyball	Photography	Tennis	Sado
Basketball	Go (Japanese Board Game)	Judo	Live band circle
Rugby	Shogi (Japanese Chess)	Baseball	ESS
Badminton	Railroad	Soccer	Art
Tennis		Badminton	String Music
Handball			Classical Japanese Dance
Swimming		<b>Athletic Circles</b>	Literary Society
Table Tennis		Table Tennis	Entrepreneurial Research Group
		Kendo	Marine Engineering Group
		Swimming	Calligraphy
		Free-style Dancing	Photography



Japanese Archery



Go (Japanese Board Game) and Shogi (Japanese Chess)



Mechatronics Technologies Research



Cutter



## Welfare Facilities

### Hongo Campus

#### Student lounge

The student lounge on the first floor of the library is a multipurpose space where students can conduct study sessions, meetings and seminars. The lobby of the library also provides a space for relaxation.

#### Chikumeikan Hall

In addition to a cafeteria and co-op store on the first floor of the main building, which serves as a welfare facility, each of the rooms on the first and second floor are effectively employed as space for student council activities and other extracurricular pursuits. Apart from this facility, there is also a training camp available as an accommodation facility for extracurricular activities.

### Imizu Campus

#### Nagonoura Hall

The cafeteria, which can seat 100 persons, is located on the first floor. There is a conversation corner next to the cafeteria. The second floor consists of a multipurpose assembly room, a training room for meetings and events, and a student council room for members to coordinate and conduct activities. In addition, there is an art room and a large Japanese-style room (26m<sup>2</sup>) that provides a spacious atmosphere for Sado and other cultural activities. Adjacent to the hall is a co-op shop that sells not only food and drink but also school supplies and coordinates various school-related examinations like TOEIC and Eiken. The co-op helps to enhance and contribute to a comfortable student life.

## Student Counseling Room

The director, counseling staff (teaching staff), nurse, and counselors (clinical psychologist) are available in the student counseling room. The staff seeks to provide solutions for various consultations on school life including work and career, relationships with friends, clubs, and consultations on mental health. Also, the room can accept consultations from parents (guardians) as well as students.

The office hours of the student counseling room at each campus are as follows:

Hongo Campus			
Student Consulting Room	Mon. – Fri.	Counseling staff	15:30 – 17:00
	Mon., Thu.	Counselor	10:00 – 17:00
	Tue., Wed.	Counselor	13:00 – 17:00
Dormitory	second Tue.	Counselor	17:00 – 21:00
School Nurse's Office	Mon. – Fri.	Nurse	8:30 – 17:00
Imizu Campus			
Student Consulting Room	Mon., Thu.	Counseling staff	15:30 – 17:00
	Tue., Wed., Fri.	Counselor	10:00 – 17:00
	Wed.	Counselor	13:00 – 17:00
School Nurse's Office	Mon. – Fri.	Nurse	8:30 – 17:00

## Dormitory

The dormitories were built with convenience of class attendance in mind. The dormitory at the Hongo Campus is called "Gyogaku-Ryo" and the dormitory at Imizu Campus is called "Wakai-Ryo".

Unlike an "arbitrary dormitory" at a university or boarding house, these dormitories are featured as "educational dormitories" and are intended not only to provide a place to live for students but also develop the moral tone to value social order and ethics through group living as part of our education.

Unique annual events hosted by student groups are planned in order to promote friendships between dormitory students. Therefore, conversations with friends and relationships with senior students that are difficult from home are typical at dormitories, resulting in a place for communication between people.

### Gyogaku-Ryo (Hongo Campus)

As of April 1, 2018

Department \ Grade	1st	2nd	3rd	4th	5th	Total
Mechanical Engineering	6	11	11 (1)⟨1⟩	12 (2)⟨1⟩	7 (1)⟨1⟩	47 (4)⟨3⟩
Electrical and Control Systems Engineering	13	8 (1)	11	9 (1)	5	46 (2)
Applied Chemistry and Chemical Engineering	15 (9)	12 (6)	11 (6)⟨1⟩	9 (3)⟨1⟩	12 (9)⟨3⟩	59(33)⟨5⟩
ECOdesign Engineering Course	0	0				0
Total	34 (9)	31 (7)	33 (7)⟨2⟩	30 (6)⟨2⟩	24(10)⟨4⟩	152(39)⟨8⟩

### Wakai-ryo (Imizu Campus)

As of May 1, 2018

Department \ Grade	1st	2nd	3rd	4th	5th	Total
Electronics and Computer Engineering	13 (4)	7 (3)	13 (3)⟨1⟩	12 (3)	7 (0)⟨1⟩	52(13)⟨2⟩
International Business	17 (16)	17 (15)	14 (10)	20(17)⟨1⟩	8 (5)	76(63)⟨1⟩
Maritime Technology	23 (3)	14 (3)	19 (6)	17 (3)	14 (2)	87 (17)
Maritime System Engineering Course	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)	2 (1)
Control Information Systems Engineering Course	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
International Business Course	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total	53 (23)	40 (22)	46(19)⟨1⟩	49(23)⟨1⟩	29 (7)⟨1⟩	217(94)⟨3⟩

The figures in parentheses are the number of female students.  
The figures in angle brackets are the number of foreign students.

# 11. Collaboration with Local Communities

## ■ Technology Promotion Association

National Institute of Technology, Toyama College Foundation for Advancement of Technology was established for the purpose of creating intellectual resources in industry-academia-government collaboration, activation of local economies and subsidization necessary for education through research exchanges based at our college. The number of member companies totals 254 and the number of individual members totals 17 (as of July 10, 2018).

The organizing committee of the foundation for the advancement of the technology promotion association was launched in August 2005 and then the foundation was established in October 2005. It was reorganized in October 2009 and evolved into its current form at the annual meeting in December 2009 after the National Institute of Technology, Toyama College was established. Chairmen since its foundation are:

1st Chairman: Ichiro Tanaka, President, TANAKA SEIMITSU KOGYO CO., LTD.  
(Term: October 24, 2005 – October 31, 2007)

2nd Chairman: Kaneyoshi Miyano, President, Tateyama Machine Co., Ltd.  
(Term: November 1, 2007 – December 13, 2009)

3rd Chairman: Koichi Kawamura, President, ASAHI PRINTING CO., LTD.  
(Term: December 14, 2009 – October 27, 2011)

4th Chairman: Noboru Matsuda, President, FINECS CO., LTD.  
(Term: October 28, 2011 – October 31, 2013)

5th Chairman: Toshikazu Todo, President, TODO KOGYO CO., LTD.  
(Term: November 1, 2013 – November 2, 2015)

6th Chairman: Hisashi Hama, President, ASAHI PRINTING CO., LTD  
(Term: November 3, 2015 )

Examples of business for member companies are shown below as business of Foundation for the Advancement of Technology.

### ● Lecture presentation

- Lecture by Seiji Kino, Director of the National Institute of Technology (Kosen), entitled “Opening a New Future for kōsen: Confronting Interruptive Environmental Changes” (October 31, 2014)
- Lecture by Wataru Ōya, Executive Vice President of YKK Corporation (and Director of the Machine Engineering Group), “Toward the Further Intensification of Local Manufacturing in Toyama Prefecture” (November 2, 2015)
- Lecture by Hisaharu Ame, Director of the Robust Management Institute, entitled “Some Small Hints toward M-M-K (Making Money, Making Money, Know No Limits) Businesses” (October 28, 2016)
- Lecture by Tomoji Takamasa, President of the National Institute of Technology, Toyama College, entitled “Establishing a Teaching System of the National Institute of Technology, Toyama College” (November 2, 2017)

Examples of support business by the Foundation for the Advancement of Technology are as follows:

- Support for student internship business
- Provision of a meeting place for member companies and teaching staff / students of the National Institute of Technology, Toyama College
- Support for education and research of students of the National Institute of Technology, Toyama College by senior fellows
- Support for career education
- Company research workshop to introduce member companies to students
- Subsidization for joint research

## ■ Open Lectures (in the school year of 2017)

Target participants	Number of open lectures
Junior high school students	33 lectures
Elementary school students / Junior high school students	2 lectures
Elementary school students	2 lectures

## 12. Research Work

### ■ Adopted Grants-in-Aid for Scientific Research

□ Grant Programs for Scientific Research from the Ministry of Education, Culture, Sports, Science, and Technology

Category	Year	2013	2014	2015	2016	2017
Grant-in-Aid for Scientific Research (A)	Number	1	0	0	0	1
	Amount	11,700	0	0	0	11,700
Grant-in-Aid for Scientific Research (B)	Number	1	1	1	1	1
	Amount	5,200	9,620	2,340	2,730	1,950
Grant-in-Aid for Scientific Research (C)	Number	13	15	16	22	26
	Amount	20,540	23,140	28,210	35,880	32,370
Grant-in-Aid for Challenging Exploratory Research	Number	1	2	5	4	3
	Amount	1,040	1,690	9,620	3,640	3,120
Grant-in-Aid for Young Scientists (B)	Number	7	7	7	6	7
	Amount	10,530	7,670	11,830	7,150	12,090
Grant-in-Aid for Research Activity Start-up	Number	0	2	3	1	0
	Amount	0	2,080	3,510	1,170	0
Grant-in-Aid for JSPS Fellows	Number	0	1	0	0	0
	Amount	0	1,233	0	0	0
Grant-in-Aid for Encouragement of Scientists	Number	1	2	2	2	2
	Amount	600	1,100	1,100	1,140	780
Total	Number	24	30	34	36	40
	Amount	49,610	46,533	56,610	51,710	62,010

Amount: Unit 1,000 Yen (Including Indirect Expenditures)

### ■ Joint Research

Year	2013	2014	2015	2016	2017
Number	42	50	61	51	67
Amount	11,470	13,883	14,660	19,764	19,112

Amount: Unit 1,000 Yen

### ■ Funded Research

Year	2013	2014	2015	2016	2017
Number	11	11	10	10	5
Amount	26,163	32,685	28,553	6,264	3,029

Amount: Unit 1,000 Yen (Including the Indirect Expenditure)

### ■ Donations Received

Year	2013	2014	2015	2016	2017
Number	20	746	356	29	28
Amount	14,859	38,071	30,909	28,646	51,070

Amount: Unit 1,000 Yen

# 13. International Exchange Programs

## ■ Academic agreements with international institutions

### □ Northeastern University (China)

The first international academic exchange was the conclusion of the agreement between one of our former colleges "Toyama National College of Technology" and Northeastern University (Shenyang, Liaoning, China) in December, 2003. Along with integration of our colleges, this agreement was sealed again in October 2010 for the purpose of deeper international exchange. Northeastern University is a top-ranking university in China. Research exchanges such as accepting visiting researchers of Northeastern University for a short period or sending our faculty members as a long-term researcher to Northeastern University have been conducted.

### □ Kauai Community College, University of Hawaii (U.S.A)

In October 2009, an agreement between our college and Kauai Community College, University of Hawaii in U.S.A (KCC) was concluded. And in November 2010, a framework agreement was concluded between Kauai Community College, University of Hawaii and 5 higher professional schools in Japan (including 4 more higher professional schools that have a Department of Maritime Technology). We have made efforts to promote international exchange programs for faculty members, sharing and improvement of technical knowledge related to maritime affairs and collaboration in technology and education. At present, while our students take international internship courses and conduct cross-cultural activities at KCC, KCC students study at our college for a short period.

### □ South Eastern Regional College (Northern Ireland, the UK)

Our college sealed an exchange agreement with South Eastern Regional College, located in Northern Ireland the UK, in March 2010, and has conducted international internship programs for students in the Advanced Courses. We have continued mutual visits of faculty members, promoting exchange activities.

### □ King Mongkut's Institute of Technology Ladkrabang (Thailand)

Our college sealed an exchange agreement with King Mongkut's Institute of Technology Ladkrabang, Thailand,

(KMITL) that is a framework agreement school of the National Institute of Technology, in August 2013, and have mutually accepted short-term international students. And we have invited faculty members of KMITL to implement lectures for students.

### □ Institute for Technical Physics and Materials Sciences, Hungarian Academy of Sciences and Pázmány Péter Catholic University (Hungary)

Our college concluded international academic exchange agreements with the Institute for Technical Physics and Materials Sciences, Hungarian Academy of Sciences (MFA) in January 27, 2015 and with Pázmány Péter Catholic University (PPCU) in February 18.

Both institutions are located in Budapest. MFA is an academic research institution dedicated to researching nanomaterials and nano systems, and is an institution respected for its high level of research in Europe. PPCU is one of the oldest universities in Hungary and was established 360 years ago. PPCU aims to launch academic fields that will serve actively in the industry of the 21st century such as information engineering and bioengineering. In the future, we will promote interchanges of faculty members and students with the aim of developing research and education in collaboration with one another.

### □ Temasek Polytechnic and Nanyang Polytechnic (Singapore)

We signed exchange agreements with these schools in 2011 and 2013, respectively, and currently conduct ongoing exchanges, primarily by accepting short-stay international students.

### □ Lamphun College of Agriculture and Technology (Thailand)

We signed an exchange agreement in 2015. We conduct exchanges in a framework involving pairing Thai students with those from our school and arranging internships for them in Japanese companies based in Thailand.

### □ Vaasa Lyseo High School (Finland)

We signed an exchange agreement in 2017. In the future, we plan to conduct student exchanges primarily with lower-year students.



Learning exchange between our own students and short-stay international students from King Mongkut's Institute of Technology, Thailand



Canoe Practical Training at KCC



A courtesy visit by the President of SERC



Robotic Practical Training at SERC



## Overseas Training Programs

An overseas training program was started in 2006 for the aim of improving students' communication skills in English through being involved in cross-cultural differences and practical experiences in foreign countries. Prior to the establishment of the overseas training program, we gave thorough consideration to the safe and smooth implementation of overseas training such as signing an agreement with international institutions and organizing a support system for the training program by faculty members.

### One-year study abroad program

In 2006, our college concluded an agreement with a high school (former Malaspina High School) attached to Vancouver Island University in Nanaimo City on the west coast of Canada. Since April 2008, a one year study abroad program has been conducted.



Students studying at a high school attached to Vancouver Island University

### Six-month study abroad program

We signed an agreement relating to studying abroad in 2005, and have been conducting cross-cultural experiences and English-language training since April 2006. This program targets fourth-year students in the Department of International Business, who spend approximately 5 months pursuing their studies at the University of Victoria English Language Center in the city of Victoria on Canada's west coast.



Students studying at the English Language Centre, University of Victoria

### Cross-Cultural Experience

Location: Each educational institution in Canada, South Korea, Taiwan, Russia, and U.S.A. (Hawaii)  
Attendee: 3rd, 4th and 5th-year students in academic departments  
Period: 3-4 weeks  
Content: Practical training in learning the foreign language and culture of each country

### International Internship in Hawaii, U.S.A.

Location: Kauai Community College, University of Hawaii (Exchange agreement was concluded in 2009)

Attendee: Students in the Advanced Courses (Maritime System Engineering Program), 4th-year students in the academic department (Department of Maritime Technology)

Period: 3 weeks

Content: Maritime technical training such as Polynesia traditional navigation and English language training

### International Internship in Northern Ireland, the UK

Location: Local Company and South Eastern Regional College (Exchange agreement was concluded in 2010)

Attendee: Students in the Advanced Courses (International Business Program, Control Information Systems Engineering Program)

Period: 4 weeks

Content: International Business Program: Internship and professional lectures at college (for 2 weeks, each)  
Engineering Program: English language training and practical training (for 2 weeks, each)

### Overseas Internship in the Southeastern Asia

Location: Thailand and Malaysia-based subsidiary of company in Toyama prefecture

Attendee: Students in the Advanced Courses, 4th-year students in academic departments

Period: 2-3 weeks

Content: Practical training

### Academic Internship

Location: Universities and research facilities in Hungary and Thailand

Attendee: Advanced course students

Period: Approximately four weeks

Content: Interns will be assigned to a laboratory where they will tackle their own research projects for the duration of the internship under the supervision of researchers or faculty from the affiliated institution.

## Acceptance of short-term international students

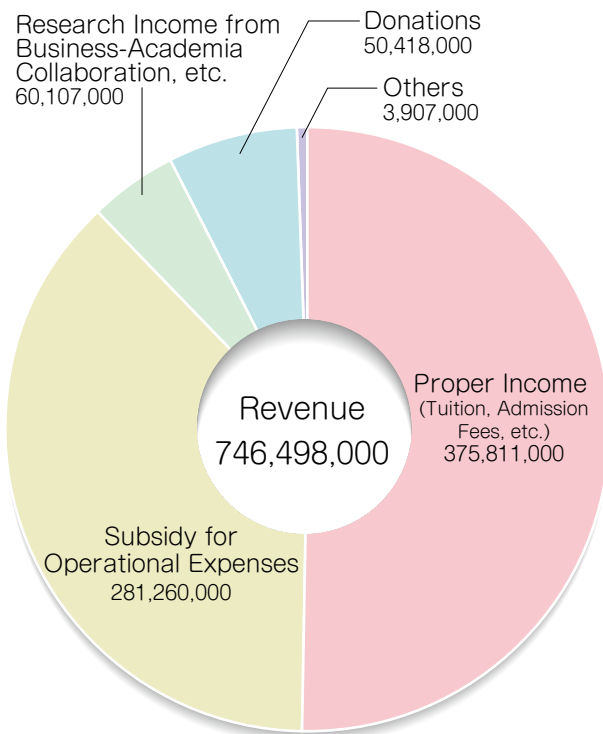
According to the framework agreement with the National Institute of Technology, we have accepted short-term international students from King Mongkut's Institute of Technology Ladkrabang since April 2012, and concluded an exchange agreement with the institute in August 2013 to further increase the number of students and expand the exchange. We also have accepted short-term international students from Temasek Polytechnic (Singapore) and Nanyang Polytechnic (Singapore) that are comprehensive affiliated schools of the National Institute of Technology and exchange affiliated schools of our college.



International students participating in our college festival

# 14. Financial Affairs

## FY 2014 Budget

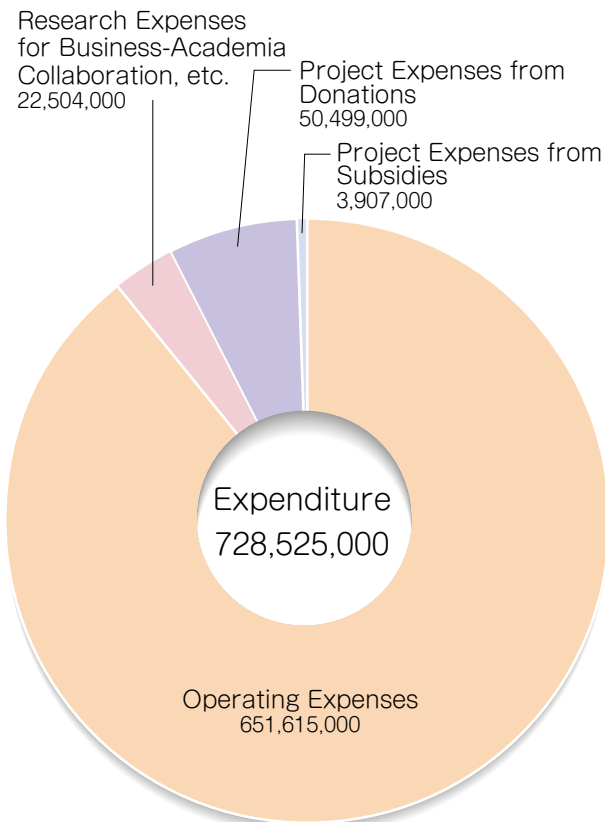


## Facilities

### (Hongo Campus)

Division \ Site Name	Hongo Site	Shimohori Site	Asahi Site	Total
Property				
College Site	55,472			55,472
Outdoor Athletic Fields	36,561			36,561
Dormitory Site	12,535			12,535
Housing Block for School Staff	2,863	596	365	3,824
Total	107,431	596	365	108,392
Building				
College Building	13,973			13,973
Gymnasium	3,674			3,674
Dormitory	4,493			4,493
Library	1,633			1,633
Welfare Facilities	1,227			1,227
Administration Division	1,483			1,483
Others	1,023			1,023
Facilities Management Rooms	245			245
Housing Complex for School Staff (Number of Households)	789 (12)	135 (2)	105 (1)	1,029 (15)
Total	28,540	135	105	28,780

(Unit: m<sup>2</sup>)



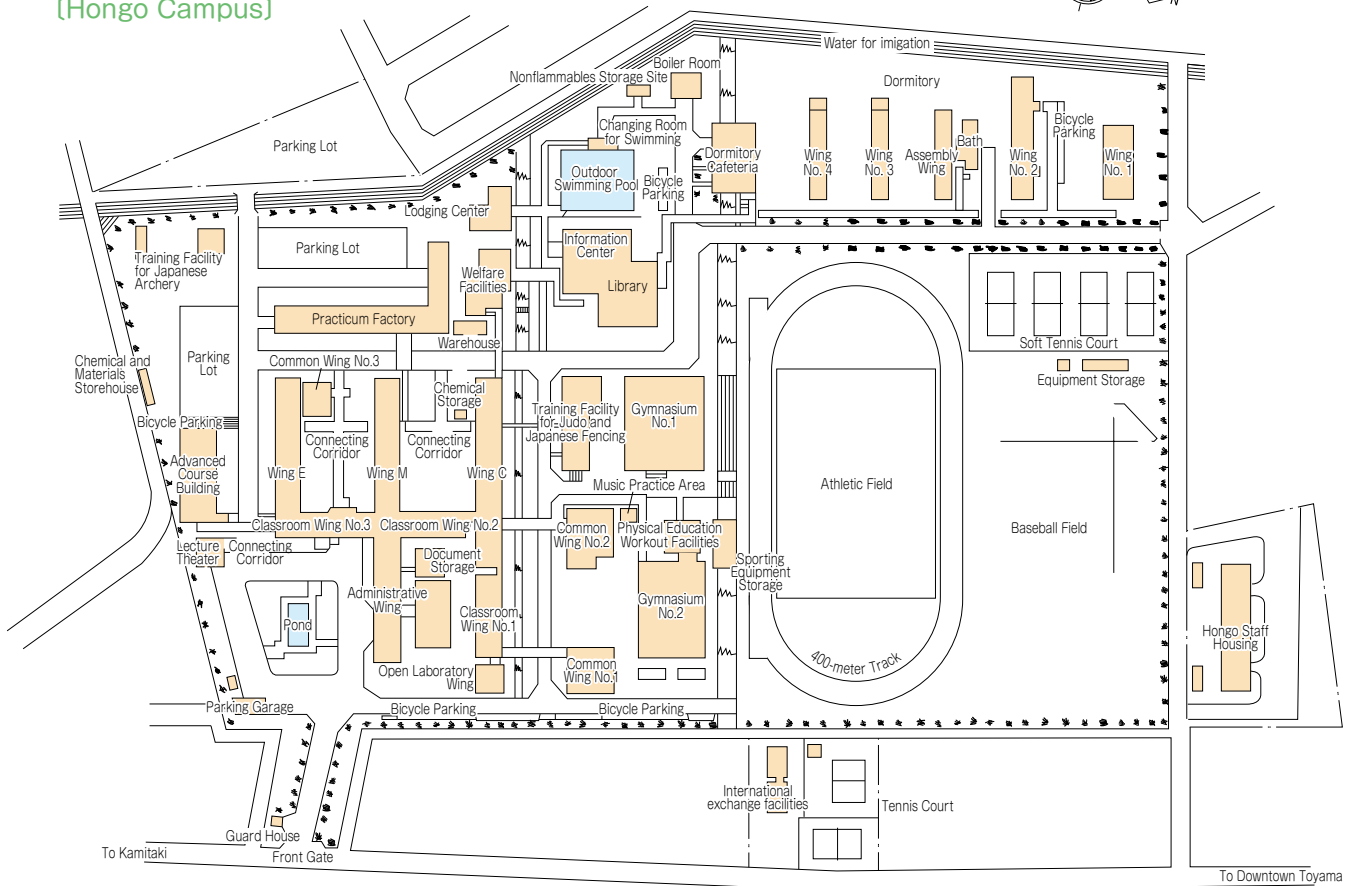
### (Imizu Campus)

Division \ Site Name	Ebieneriya Site	Horiesengoku Site	Total
Property			
College Site	45,336		45,336
Outdoor Athletic Fields	41,703		41,703
Facilities Site for Experiments and Practical Training, etc.	15,808		15,808
Dormitory Site		11,232	11,232
Housing Site for School Staff	6,962		6,962
Total	109,809	11,232	121,041
Building			
College Building	14,099	1,423	15,522
Gymnasium	3,031		3,031
Dormitory	7,029		7,029
Library	1,626		1,626
Welfare Facilities	1,347		1,347
Administration Division	1,537		1,537
Others	996		996
Facilities Management Rooms	399		399
Housing Complex for School Staff (Number of Households)	639 (9)		639 (9)
Total	30,703	1,423	32,126

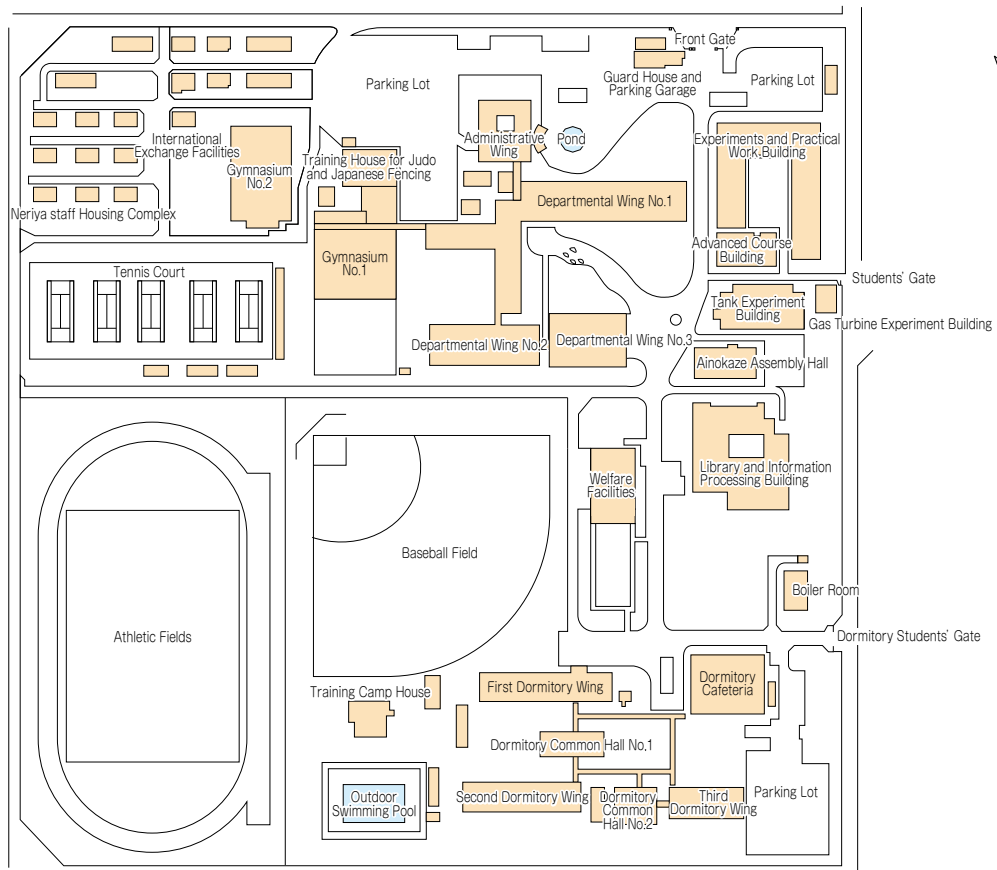
(Unit: m<sup>2</sup>)

# Campus Map

## [Hongo Campus]



## [Imizu Campus]



# 15. Enrollment Statistics

## Admission Capacity and Current Enrollment

(Hongo Campus)

As of May 1, 2018

Admission Capacity	Grade	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Advanced Course First Grade	Advanced Course Second Grade	Total
Department of Mechanical Engineering	(40 students)	41 ( 3 )	43 ( 2 )	44 ( 3 ) ①	47 ( 3 ) ①	39 ( 3 ) ①			214 (14) ③
Department of Electrical and Control Systems Engineering	(40 students)	42 ( 1 )	46 ( 5 )	52 ( 4 )	38 ( 3 )	40 ( 3 )			218 (16)
Department of Applied Chemistry and Chemical Engineering	(40 students)	42 (25)	40 (19)	47 (23) ①	43 (24) ①	40 (26) ③			212 (117) ⑤
ECOfdesign Engineering Course	(24 students)						18( 1)	34 ( 5)	52 ( 6)
Total		125 (29)	129 (26)	143 (30) ②	128 (30) ②	119 (32) ④	18( 1)	34 ( 5)	696 (153) ⑧

Note 1: Numbers in parentheses include numbers of female students. Note 2: Circled numbers include numbers of foreign exchange students.

(Imizu Campus)

As of May 1, 2018

Admission Capacity	Grade	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Trainee	Advanced Course First Grade	Advanced Course Second Grade	Total
Department of Electronics and Computer Engineering	(40 students)	44 (10)	45 (16)	39 ( 9 ) ①	54 (11)	42 (11) ①				224 (57) ②
Department of International Business	(40 students)	40 (38)	44 (37)	44 (30)	52 (43) ①	41 (36)				221 (184) ①
Department of Maritime Technology	Nautical Science Course (20 students)	42 ( 6 )	20 ( 8 )	23 ( 8 )	22 ( 7 )	19 ( 6 )	17 ( 7 )			238 (53)
	Marine Engineering Course (20 students)		23 ( 5 )	20 ( 3 )	19 ( 2 )	17 ( 1 )	16			
Control Information Systems Engineering Course	(8 students)							11 ( 3 )	10 ( 1 )	21 ( 4 )
International Business Course	(4 students)							3 ( 3 )	4 ( 2 )	7 ( 5 )
Maritime System Engineering Course	(4 students)							3	4 ( 2 )	7 ( 2 )
Total		126 (54)	132 (66)	126 (50) ①	147 (63) ①	119 (54) ①	33 ( 7 )	17 ( 6 )	18 ( 5 )	718 (305) ③

Note 1: Numbers in parentheses include numbers of female students. Note 2: Circled numbers include numbers of foreign exchange students.

## Enrollment by Place of Origin

(Hongo Campus)

As of May 1, 2018

Place	Grade	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Advanced Course First Grade	Advanced Course Second Grade	Total
Toyama Prefecture		119 (28)	128 (26)	136 (29)	117 (29)	112 (26)	17 ( 1 )	33 ( 5 )	662 (144)
Ishikawa Prefecture		2		1	1	1			5
Miyagi Prefecture								1	1
Saitama Prefecture		1							1
Chiba Prefecture				1					1
Kanagawa Prefecture					1 ( 1 )		1		2 ( 1 )
Niigata Prefecture					1				1
Gifu Prefecture		3 ( 1 )	1	1 ( 1 )	4				9 ( 2 )
Shizuoka Prefecture					1				1
Shiga Prefecture					1	1 ( 1 )			2 ( 1 )
Aichi Prefecture						1 ( 1 )			1 ( 1 )
Osaka Prefecture				2					2
Foreign countries				2	2	4 ( 4 )			8 ( 4 )
Total		125 (29)	129 (26)	143 (30)	129 (30)	119 (32)	18 ( 1 )	34 ( 5 )	696 (153)

Numbers in parentheses include numbers of female students.

(Imizu Campus)

As of May 1, 2018

Place	Grade	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Trainee	Advanced Course First Grade	Advanced Course Second Grade	Total
Toyama Prefecture		104 (47)	116 (56)	112 (42)	128 (56)	110 (53)	26 (7)	15 ( 6 )	16 ( 4 )	627 (271)
Ishikawa Prefecture		3 ( 2 )	5 ( 4 )	4 ( 4 )	1	3	2	1		19 (10)
Hokkaido					1					1
Aomori Prefecture				1 ( 1 )	2					3 ( 1 )
Miyagi Prefecture			1	1						2
Yamagata Prefecture			1 ( 1 )		1 ( 1 )	1 ( 1 )	1			4 ( 3 )
Fukushima Prefecture			2 ( 1 )	1	1 ( 1 )					4 ( 2 )
Ibaragi Prefecture		2			1 ( 1 )					3 ( 1 )
Gunma Prefecture			1							1
Saitama Prefecture		1			2					3
Tokyo						1	1			2
Kanagawa Prefecture		2	1 ( 1 )		1 ( 1 )			1	1 ( 1 )	6 ( 3 )
Niigata Prefecture		3 ( 1 )		1 ( 1 )	4 ( 1 )	1	1			10 ( 3 )
Nagano Prefecture		1			1		1			3
Gifu Prefecture		2 ( 1 )	3 ( 1 )	1 ( 1 )	1 ( 1 )	1				8 ( 4 )
Shizuoka Prefecture		1								1
Aichi Prefecture		1								1
Mie Prefecture					1					1
Siga Prefecture		1 ( 1 )		1 ( 1 )						2 ( 2 )
Osaka Prefecture		1		1		1				3
Hyogo Prefecture		3 ( 1 )		1						4 ( 1 )
Yamaguchi Prefecture		1 ( 1 )								1 ( 1 )
Kagawa Prefecture			1 ( 1 )				1			2 ( 1 )
Fukuoka Prefecture			1 ( 1 )							1 ( 1 )
Saga Prefecture					1					1
Nagasaki Prefecture				1						1
Okinawa Prefecture									1	1
Foreign countries				1	1 ( 1 )	1				3 ( 1 )
Total		126 (54)	132 (66)	126 (50)	147 (63)	119 (54)	33 ( 7 )	17 ( 6 )	18 ( 5 )	718 (305)

Numbers in parentheses include numbers of female students.



# 16. Alumni Post-Graduation Employment/Education

## Alumni patterns of continuing advanced studies

### Department of Mechanical Engineering

National Institute of Technology, Toyama College Advanced Courses / Akita University / Tohoku University / Yamagata University / University of Tsukuba / Gunma University / Chiba University / The University of Tokyo / Tokyo Institute of Technology / The University of Electro-Communications / Niigata University / Nagaoka University of Technology / University of Toyama / Kanazawa University / Shinshu University / Nagoya University / Nagoya Institute of Technology / Toyohashi University of Technology / Osaka University / Kyushu Institute of Technology / Takasaki City University of Economics / Tokyo Metropolitan University

### Department of Electrical and Control Systems Engineering

National Institute of Technology, Toyama College Advanced Courses / Akita University / Tohoku University / Yamagata University / University of Tsukuba / Gunma University / Chiba University / The University of Tokyo / Tokyo Institute of Technology / The University of Electro-Communications / Niigata University / Nagaoka University of Technology / University of Toyama / Kanazawa University / Shinshu University / Nagoya University / Nagoya Institute of Technology / Toyohashi University of Technology / Osaka University / Kyushu Institute of Technology / Takasaki City University of Economics / Tokyo Metropolitan University

### Department of Applied Chemistry and Chemical Engineering

National Institute of Technology, Toyama College Advanced Courses / Hokkaido University / Muroran Institute of Technology / Tohoku University / University of Tsukuba / Gunma University / Chiba University / Tokyo Institute of Technology / Tokyo University of Agriculture and Technology / Niigata University / Nagaoka University of Technology / University of Toyama / Kanazawa University / University of Fukui / Shinshu University / Gifu University / Nagoya University / Nagoya Institute of Technology / Toyohashi University of Technology / Kyoto Institute of Technology / Osaka University / Okayama University / Hiroshima University / Tokushima University / Kyushu University / Tokyo Metropolitan University / Osaka Prefecture University

### Department of Electronics and Computer Engineering

National Institute of Technology, Toyama College Advanced Courses / University of Tsukuba / Utsunomiya University / Chiba University / Ochanomizu University / The University of Electro-Communications / Niigata University / Nagaoka University of Technology / University of Toyama / Kanazawa University / Shinshu University / Gifu University / Toyohashi University of Technology / Hiroshima University / Kanazawa Medical Center Kanazawa School of Nursing / Tokyo Metropolitan University

### Department of International Business

National Institute of Technology, Toyama College Advanced Courses / Hokkaido University / University of Tsukuba / Saitama University / Ochanomizu University / Tokyo University of Foreign Studies / Niigata University / University of Toyama / Kanazawa University / Shinshu University / Nagoya University / Mie University / Shiga University / Nara Women's University / Osaka University / Kobe University / Hiroshima University / Kyushu University / Osaka City University / Toyama Prefectural School of Nursing, Midwifery and Public Health / Toyama City Nursing School / Sophia University / Chuo University / Meiji University / Senshu University / Kyoto Women's University / Kansai University / Kansai Gaidai University / International Academy of Media / University of Ottawa

### Department of Maritime Technology (Nautical Science Course)

National Institute of Technology, Toyama College Advanced Courses / National Institute of Technology, Toba College Advanced Courses / Akita University / Tokyo University of Marine Science and Technology / Nagaoka University of Technology / Toyohashi University of Technology / Kobe University

### Department of Maritime Technology (Marine Engineering Course)

National Institute of Technology, Toyama College Advanced Courses / Tokyo University of Marine Science and Technology / Nagaoka University of Technology / Toyohashi University of Technology / Kobe University / National Institute of Fitness and Sports in KANOYA

### ECodesign Engineering Course

Hokkaido University Graduate Schools / Tohoku University Graduate Schools / University of Tsukuba Graduate Schools / Chiba University Graduate Schools / The University of Tokyo Graduate Schools / The University of Electro-Communications Graduate Schools / Tokyo Institute of Technology Graduate Schools / Yokohama National University Graduate Schools / Nagaoka University of Technology Graduate Schools / University of Toyama Graduate Schools / Kanazawa University Graduate Schools / Shinshu University Graduate Schools / Nagoya University Graduate Schools / Nagoya Institute of Technology Graduate Schools / Toyohashi University of Technology Graduate Schools / Kyoto Institute of Technology Graduate Schools / Osaka University Graduate Schools / Kobe University Graduate Schools / Nara Institute of Science and Technology / Wakayama University Graduate Schools / Kyushu University Graduate Schools / Osaka Prefecture University Graduate Schools

### Control Information System Engineering Course

Tohoku University Graduate Schools / Tokyo Institute of Technology Graduate Schools / Nagaoka University of Technology Graduate Schools / Japan Advanced Institute of Science and Technology / Toyohashi University of Technology Graduate Schools / Nara Institute of Science and Technology / Osaka Prefecture University Graduate Schools

### International Business Course

Japan Advanced Institute of Science and Technology

## Alumni employment patterns

### Department of Mechanical Engineering

YKK Corporation / ZEON Corporation / Hokuriku Electric Power Company, Incorporated / Central Japan Railway Company / Idemitsu Kosan Co., Ltd. / SUBARU Techno Corporation / Asahi Printing Company / Kitamura Machinery / Sugino Machine Limited / FINECS Co., Ltd. / YOSHINDO Inc / Richell Corporation / Komatsu Ltd. / NISSAN Automotive Technology Co., Ltd. / Otsuka Pharmaceutical Factory, Inc. / Astellas Pharma Tech Co., Ltd. / Sankyo Tateyama, Inc. / Chuetsu-Metal / Toyama Chemical Co., Ltd. / NACHI-FUJIKOSHI CORP. / East Japan Railway Company / Toyota Motor Corporation. / Mitsubishi Heavy Industries, Ltd. / Kawasaki Heavy Industries, Ltd. / Daihatsu Motor Co., Ltd. / NGK SPARK PLUG Co., Ltd. / Kao Corporation. / Nitto Denko Corporation / DAIKIN INDUSTRIES, LTD / ANA Line Maintenance Technics /

### Department of Electrical and Control Systems Engineering

Hokuriku Electric Power Company, Incorporated / The Kansai Electric Power Co., Inc. / Chubu Electric Power Co., Inc. / Tokyo Electric Power Company Holdings, Inc. / Japan Atomic Energy Agency / Central Japan Railway Company / Japan Freight Railway Company / Ainokaze Toyama Railway / ANA Line Maintenance Technics / NACHI-FUJIKOSHI CORP. / YKK Corporation / Toyama Murata Manufacturing Co., Ltd. / HOKURIKU ELECTRICAL CONSTRUCTION CO., LTD. / Hokuriku Electrical Safety Inspection Association. / Chuetsu Pulp & Paper Co., Ltd. / ZEON Corporation / Nippon Soda Co., Ltd. / Idemitsu Kosan Co., Ltd. / ASAHI PRINTING CO., LTD. / NHK Media Technology, Inc. / K N B · F / NTT FACILITIES, INC. / Nippon Electronics Service Co., Ltd. / Shikino High-Tech Co., Ltd. / MEIDENSHA CORPORATION / Yazaki Corporation / SEIKO EPSON CORPORATION / NGK SPARK PLUG Co., Ltd. / DAIKIN INDUSTRIES, LTD

### Department of Applied Chemistry and Chemical Engineering

YKK Corporation / Astellas Pharma Tech Co., Ltd. / Toyama Chemical Co., Ltd. / Kracie Holdings, Ltd. / KYOWA PHARMA CHEMICAL CO., LTD. / Tateyama Pharmaceutical Factory Co., Ltd. / ZEON Corporation / FINECS Co., Ltd. / Suntory Holdings Limited / Nippon Soda Co., Ltd. / TOA Pharmaceuticals Co., Ltd. / TOAGOSEI CO., LTD. / ROKI TECHNO CO., LTD. / The Kansai Electric Power Co., Inc. / TOYAMA SUGAKI Co., Ltd. / SANSHO MEC CO., LTD. / Kao Corporation. / Idemitsu Kosan Co., Ltd. / Maruzen Petrochemical Co., Ltd. / Otsuka Pharmaceutical Factory, Inc. / UNITIKA LTD. / MEGMILK SNOW BRAND Co., Ltd. / Showa Denko K.K. / DAIKIN INDUSTRIES, LTD / TSUMURA & CO. / DIC Corporation / KANEKA CORPORATION / Maeda Pharmaceutical Co., LTD / KONGO CHEMICAL CO., LTD. / JUZEN CHEMICAL CORPORATION

### Department of Electronics and Computer Engineering

Japan Broadcasting Corporation / NTT DATA / JGC CORPORATION / KOUCHI INTEC Inc. / NTT FIELDTECHNO. / HOKURIKU COMPUTER SERVICE CO., LTD. / Hokuriku Electric Power Company, Incorporated / Hitachi Kokusai Electric Inc. / West Japan Railway Company / YKK Corporation / NHK Media Technology, Inc. / Panasonic System Solutions Japan Co., Ltd. / ANA Base Maintenance Technics Co., LTD / Hokuden-software. Co., Ltd. / Shikino High-Tech Co., Ltd. / Komatsu NTC Ltd. / TOAGOSEI CO., LTD. / KDDI Engineering / Seiko Epson Corporation / The Kansai Electric Power Co., Inc. / Toyota Technical Development Corporation / NACHI-FUJIKOSHI CORP. / Chubu Electric Power Co., Inc. / Central Japan Railway Company / DMM.com LLC / MITSUBISHI ELECTRIC BUILDING TECHNO-SERVICE CO., LTD. / Hitachi Social Information Services, Ltd. / NTT COMWARE CORPORATION / Toyama Prefectural Police / National Printing Bureau

### Department of International Business

Ministry of Foreign Affairs / Ministry of Finance / Ministry of Economy, Trade and Industry / Ministry of Land, Infrastructure, Transport and Tourism / Cabinet Office / The Ministry of Justice / Ministry of Health, Labour and Welfare / national university corporation / Tokyo Metropolitan Government / Toyama Prefecture / Toyama Prefectural Police / Toyama City / TAKAOKA City / Hokuriku Electric Power Company, Incorporated / YKK Corporation / THE HOKURIKU BANK, LTD. / The First Bank of Toyama, Ltd. / Fushiki Kairiku Unso Co., Ltd. / FINECS Co., Ltd. / Ainokaze Toyama Railway / KOMATSU CASTEX LTD. / Kitamura Machinery Co., LTD. / ISHITOMO HOME / C.A.P. Inc. / JAPAN MEDIC Co., Ltd. / HOTEL OKURA TOKYO BAY / JR TOKAI HOTELS CO., LTD. / NIPPON EXPRESS CO., LTD. / Chubu Electric Power Co., Inc. / Konoike Transport Co., Ltd. / Drecom Co., Ltd.

### Department of Maritime Technology (Nautical Science Course)

NYK LINE. / Mitsui O.S.K. Lines, Ltd. / "K" Line RoRo Bulk Ship Management Co., Ltd. / Sado Steam Ship Co., Ltd. / Shin Nihonkai Ferry / Tsugaru Kaikyo Ferry / Uyeno Transtech Ltd. / Ube Shipping & Logistics, Ltd. / SOC Marine Co., Ltd. / Ocean Trans Co., Ltd. / KAWASAKI KINKAI KISEN KAISHA, LTD. / KAGOSHIMA SENPAKU KAISHA, LTD. / SOC Logistics Co., Ltd. / Nippon Shipping Co., Ltd. / Fukuju Shipping Co. Ltd. / NMK / PENTA-OCEAN DREDGING CO., LTD. / Nihonkai Eisen Co., Ltd. / Asahi Unyu Kaisha, Ltd. / Utoc Corporation / Daito Corporation / TST CORPORATION / NIPPON EXPRESS CO., LTD. / NIPPON CONTAINER TERMINALS Co., Ltd. / MEIKO TRANS CO., LTD. / UNI-X CORPORATION / Unix Line Pte Ltd / SEIZANDO-SHOTEN PUBLISHING CO., LTD. / JAPAN COAST GUARD / Toyama Prefectural Agricultural, Forestry & Fisheries Research Center

### Department of Maritime Technology (Marine Engineering Course)

NYK LINE. / Mitsui O.S.K. Lines, Ltd. / Kawasaki Kisen Kaisha, Ltd. / "K" Line RoRo Bulk Ship Management Co., Ltd. / JX Ocean Co., Ltd. / NYK CRUISES CO., LTD. / Mitsui O.S.K. Passenger Line, Ltd. / MOL Ferry Co., Ltd. / Sado Steam Ship Co., Ltd. / Shin Nihonkai Ferry / ASAHI TANKER CO., LTD. / Ube Shipping & Logistics, Ltd. / KAWASAKI KINKAI KISEN KAISHA, LTD. / Kyoei Marine Co., Ltd. / Tokai Kisen Co., Ltd. / Global Ocean Development Inc. / NMK / Sankyu Inc. / NIPPON EXPRESS CO., LTD. / Japan Marine United Corporation / Niigata Shipbuilding & Repair, INC. / Wärtsilä Japan Ltd. / Hokuriku Plant Services Co., Ltd. / Idemitsu Kosan Co., Ltd. / DAIKIN INDUSTRIES, LTD / TOYOGASMETER CO., LTD. / TORAY INDUSTRIES, INC. / YANMAR ENERGY SYSTEM CO., LTD. / YKK Corporation / JAPAN COAST GUARD

### ECodesign Engineering Courses

Asahi Printing Company / Sugino Machine Limited / IZAK CO., LTD. / Daito Pharmaceutical Co., Ltd. / YKK Corporation / NACHI-FUJIKOSHI CORP. / TANAKA SEIMITSU KOGYO CO., LTD. / Nichi-Iko Pharmaceutical Co., Ltd. / Tateyama Kagaku Group / Sankyo Tateyama, Inc. / KOKUSAI ELECTRIC CORPORATION / Fuji Chemical Industries Co., Ltd. / Nissan Engineering, Ltd. / FINECS Co., Ltd. / AISIN SINWA CO., LTD. / Hanshin Group / KUWAYAMA CORPORATION / Nitto Medic Co., Ltd. / Mizuno Machinery Co., Ltd. / JUZEN CHEMICAL CORPORATION / YOSHINDO Inc / Ishigane Seiki / HOKURIKU ELECTRIC INDUSTRY CO., LTD. / MARUEI-UNYU-KIKO Co., Ltd. / MIURA CO., LTD. / NIPPON SHOKUBAI CO., LTD. / AMADA HOLDINGS CO., LTD. / Nippon Soda Co., Ltd. / Tosoh Zeolum, Inc.

### Control Information Systems Engineering Course

INTC Inc. / NACHI-FUJIKOSHI CORP. / Hokuden-software. Co., Ltd. / KOUCHI INTEC Inc. / Komatsu NTC Ltd. / Kokusai Electric Semiconductor Service Inc. / Hokuriku Computer Graphics / Hokuriku Electric Co., Ltd. / Sankyo Tateyama, Inc. / Soft / TATEYAMA KAGAKU INDUSTRY CO., LTD. / TOYOTA MOTOR CORPORATION. (Toyama) / NihonSofttech Inc. / ANA Base Maintenance Technics Co., LTD / NTT DATA / NEOSYSTEM Co., Ltd. / Hitachi Kokusai Electric Inc. / MEDIASEEK, inc. / MEDIASEEK, inc. / Otsuka Pharmaceutical Co., Ltd. / DreamArts Corporation / Hitachi, Ltd. / Mitsubishi Electric Corporation / JGC CORPORATION / FUJITSU NETWORK SOLUTIONS LIMITED / FUJITSU LIMITED / FUJI SOFT INCORPORATED / PFU Limited / MIWA LOCK Co., LTD. / JESK HORIUCHI CO., LTD.

### International Business Course

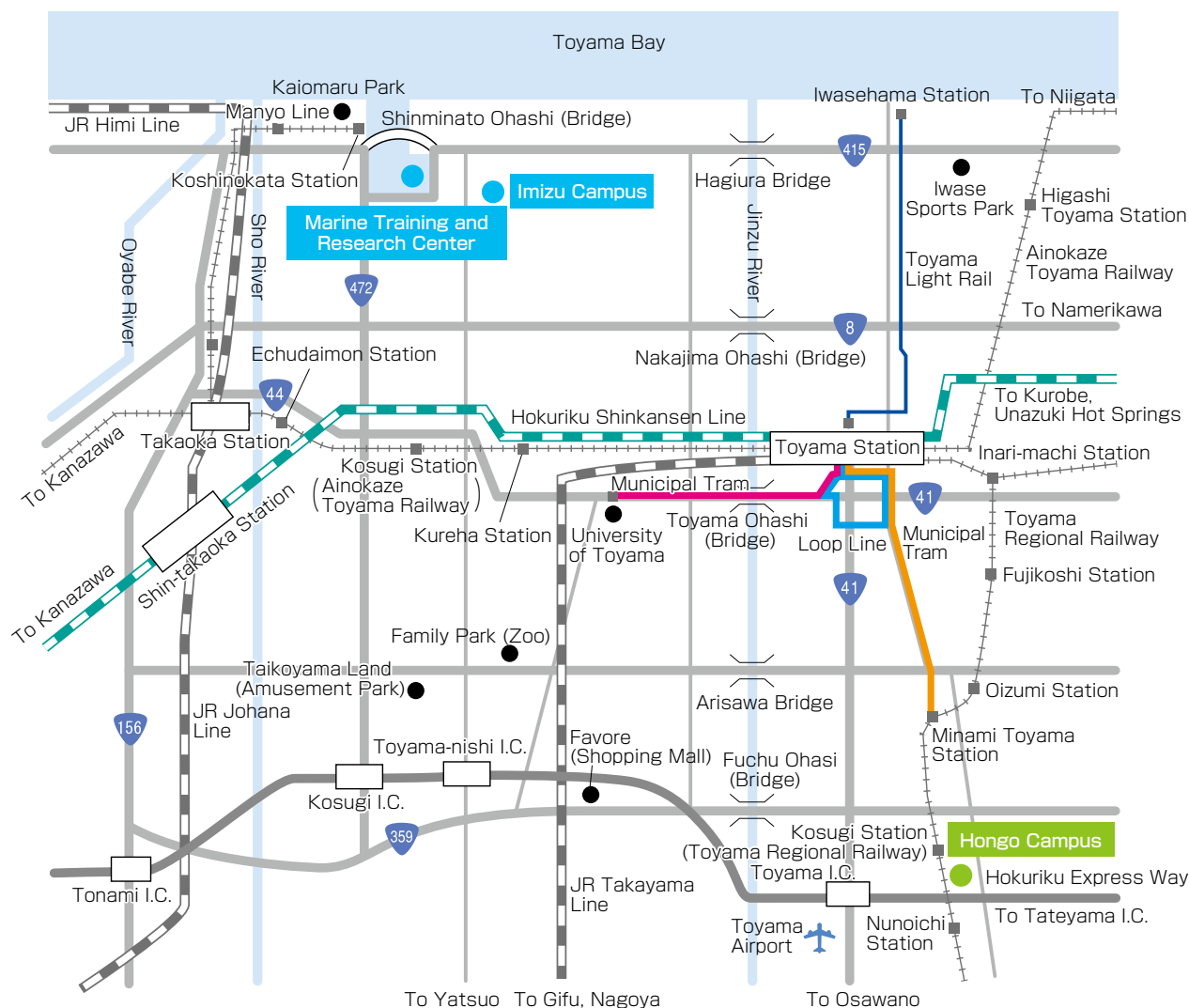
Asahi Printing Company / SMK Corporation / Seals Co., Ltd. / Toyama Simin Plaza / Johnson Controls, K.K. / Shin-Etsu Chemical Co., Ltd. / Soft / TATEYAMA KAGAKU INDUSTRY CO., LTD. / Chitaka International Foods, Inc. / TOYOTOMI SANGYO GROUP / FIRST BANK OF TOYAMA / Nissei Industry Corporation / Japan Open Systems / PYRAMID FILM Inc. / PFU Limited / FUJIKOSHI Information Systems Co., Ltd. / BraVance Technologies Co., Ltd. / Hokuriku Computer Graphics. / Hokuriku Denki Shokai. / Mynavi Corporation / MARUEI-UNYU-KIKO Co., Ltd. / Resorttrust, Inc. / YKK Corporation

### Maritime System Engineering Course

Kawasaki Kisen Kaisha, Ltd. / ASAHI TANKER CO., LTD. / SOC Marine Co., Ltd. / Nissei Industry Corporation / YKK Corporation / Ministry of Land, Infrastructure, Transport and Tourism / NIPPON EXPRESS CO., LTD. / Japan Drilling Co., Ltd. / Santoku Senpaku Co., Ltd. / TERASAKI ELECTRIC CO., LTD. / YANMAR ENERGY SYSTEM CO., LTD. / Universal Workers - The Gunkanjima Concierge Company



## Access Map



I.C. : Expressway Entrance and Exit

### Hongo Campus

13 Hongo-machi, Toyama City, Toyama Prefecture,  
939-8630 Japan

TEL: +81-(0)76-493-5402 FAX: +81-(0)76-492-3859

#### Bus Service:

Take a bus for "National College of Technology" (via Asana-cho or via Shimobori) from Stop No. 5 at the bus terminal in front of the south exit of Toyama Station. Get off the bus at the final bus stop, which is located inside the front gate of the Hongo Campus. It takes about half an hour.

#### Railway Service:

From "Dentetsu Toyama" (Toyama Regional Railway) Station  
Take the train for "Iwakuraji", get off the train at Kosugi Station (not to be confused with the Kosugi Station on the Ainokaze Toyama Railway). The time required is about 14 minutes. From the Kosugi Station it is about a 15-minute walk to the Hongo Campus.

From Iwakuraji Station

Take a train for "Dentetsu Toyama", get off the train at Nunoichi Station. The time required is about 15 minutes. From Nunoichi Station it is about a 15-minutes walk to the Hongo Campus.

### Imizu Campus

1-2 Ebieneriya, Imizu City, Toyama Prefecture,  
933-0293 Japan

TEL: +81-(0)766-86-5100 FAX: +81-(0)766-86-5130

#### Bus Service:

Take a bus for "Shinko Higashi\_Guchi" from Stop No.3 at the bus terminal in front of the south exit of Toyama Station. Get off the bus at the "Neriya" bus stop. It takes around half an hour. From the bus stop, it's about a 2-minutes walk to the Imizu Campus.

#### School Bus Service:

Services with fares charged are available morning and evening from Higashi Toyama Station, Toyama Station, Kureha Station, Kosugi Station, (Ainokaze Toyama Railway)Takaoka Station, and in the Shinminato Area. Contact the school for more details.

#### Community Bus Service:

Imizu City Community Bus Services are also available. Contact the school for more details.

<http://www.nc-toyama.ac.jp>