

Enrollment in April 2027

**Graduate School of
Information Science and Technology
Hokkaido University**

Application Guidelines
Master's Degree Program

**Graduate School of Information Science and Technology
Hokkaido University**

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1. Number of Students to be Admitted

Division	Number of Students to be Admitted
Information Science and Technology	196 students

2. Course Options

This division has five courses in its education program. Applicants select one course and then take entrance examinations for the specialist subjects in that course. Refer to "Objectives of the Graduate School, Division, and Overview of each Course" on page 11 of these guidelines for information on each course and "List of courses, supervisors and research fields" on pages 14-18 for information on points such as research fields.

3. Application Criteria

Individuals who wish to apply must meet one of the following criteria:

- (1) Individuals who have graduated from a Japanese university* or expect to by March 31, 2027

* "University" in this category refers to one of the universities to which Article 83 of the School Education Act (formal undergraduate programs offered by universities in Japan) is applicable

- (2) Individuals who have received a bachelor's degree from the National Institution for Academic Degrees and Quality Enhancement of Higher Education or expect to by March 31, 2027.
- (3) Individuals designated by the Minister of Education, Culture, Sports, Science and Technology (Public Notice of the Ministry of Education No. 5, 1953)
- (4) Individuals who are recognized as having studied in a university for three or more years, or having completed 15 years of education by a foreign educational system (including cases in which the individual completed 15 years of education in a foreign educational system from Japan by using an overseas school's correspondence education system and other cases designated by the Minister of Education, Culture, Sports, Science and Technology in which the individual completed relevant courses at an educational facility in Japan that offers courses from an overseas university as part of that country's educational system (limited to individuals who are recognized as having completed 15 years of education in that country)), and who are recognized to have an excellent academic record at a graduate school at HU (hereinafter referred to as "graduates of an accelerated program").
- (5) Individuals who have completed the 16 years of education in a foreign country or expect to by March 31, 2027 (hereinafter referred to as "graduates of education programs outside Japan").
- (6) Individuals who have completed 16 years of education in correspondence course subjects provided by a foreign educational system in Japan or expect to by March 31, 2027 (hereinafter "graduates of education programs outside Japan by correspondence").
- (7) Individuals who have completed relevant courses at an educational facility in Japan designated by the Minister of Education, Culture, Sports, Science and Technology that offers courses from an overseas university as part of that country's educational system (limited to individuals who are recognized as having completed 16 years of education by a foreign educational system) or expect to by March 31, 2027 (hereinafter referred to as "graduates of institutions in Japan who have completed courses from a non-Japanese university as part of a non-Japanese educational system").
- (8) Individuals who have received a degree equivalent to a bachelor's degree from a foreign university or school*¹ after completing a course with a duration of three years or more*² or expect to by March 31, 2027 (hereinafter referred to as "applicants with an equivalent of a bachelor's degree from a university outside Japan").

*¹ Regarding general matters such as education and research, eligibility is limited to institutions that have passed an evaluation given by a party accredited by the country's government or a relevant organization or body, or has received an equivalent designation from the Minister of Education, Culture, Sports, Science and Technology.

*² Including cases in which the individual completed the course in Japan by completing the subjects through the overseas school's correspondence education system and cases in which the individual completed courses at an educational facility designated by the Minister of Education, Culture, Sports, Science and Technology that offers courses from an overseas university as part of that country's educational system.

- (9) Other cases designated by the Minister of Education, Culture, Sports, Science and Technology in which an individual has completed another specialized program at a specialized training college (limited to those that have a course duration of 4 years or more and meet other criteria set by the Minister of Education, Culture, Sports, Science and Technology) on or after the date set by the Minister of Education, Culture, Sports, Science and Technology, or expects to by March 31, 2027 (hereinafter referred to as "individuals who have completed coursework at a specialized training college").
- (10) Individuals who are recognized to have academic aptitude equivalent or superior to university graduates through an individual applicant screening process at the Graduate School, and will be at least 22 years old by March 31, 2027 (hereinafter referred to as "applicants requesting screening for a special case").

4. Application Period for Preliminary Screening of Qualifications

May 1 (Fri.) – May 8 (Fri), 2026 [be punctual]

In "3. Application Criteria", if one of the criteria is applicable to you, you will need to undergo a preliminary screening during the above period before your application is accepted.

- (4) a graduate of an accelerated program
- (5) a graduate of an education program outside Japan
- (6) a graduate of an education program outside Japan by correspondence
- (7) a graduate of an institution in Japan who has completed courses from a non-Japanese university as part of a non-Japanese educational system
- (8) an applicant with an equivalent of a bachelor's degree from a university outside Japan
- (9) an individual who has completed coursework at a specialized training college
- (10) an applicant requesting screening for a special case

Please submit your documents for Preliminary Screening of Qualifications (section 7) during this period.

※The application documents must reach us no later than May 8.

(Application forms are accepted between 9:00am and noon and between 1:00pm and 5:00pm, except on Saturday, Sunday and Japanese holiday.)

Notes:

- Please download the templates for preliminary screening of qualifications via IST website.
- The results of your preliminary screening of qualifications will be emailed to you by May 20(Wed), 2026. If you are recognized as eligible to apply, pay the application fee under the guidance of the email. If you do not pay the application fee within the designated period, your application will not be accepted.
- The documents you submit for the preliminary screening of qualifications will be handled as a part of official application documents. You will also need to submit a TOEIC, TOEFL or IELTS score sheet to arrive between **July 21 (Tue.) and July 23 (Thu.), 2026.**

5. Application Procedures

The application procedures consist of three steps: **(1)** online pre-registration(<https://e-apply.jp/e/hokudai-ist>), **(2)** payment of the examination fee, **(3)** submission of application documents (paper-based). If you fail to complete any of these steps in the required timeframe, your application will not be processed and will be cancelled.

<Online Pre-registration and Payment Period>

10:00 am May 21 (Thu.) – 5:00 pm May 28 (Thu.), 2026 (Japan Standard Time)

<<Examination Fee>>

Applicants are required to pay the examination fee (30,000 yen) after online registration. Applicants must pay a service fee of 500 yen in addition to the examination fee. Available payment methods includes: credit card; China Pay; convenience store; bank or post office ATM. Please note that the payment through a Bank / Postal Office teller is not accepted. For further details on payment procedures, please see the website.

Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President's Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the IST office in advance.

The examination fee is non-refundable except for the following cases:

1. Applicants who paid the fee but cancelled their application (including cases where an application was rejected or application documents were not submitted by the deadline)
2. Applicants paid the fee more than once by mistake
3. Applicants who are exempt from the examination fee mistakenly paid the fee.

<Application Period>

May 25 (Mon.) – May 28 (Thu.), 2026

※The application documents must reach us no later than May 28.

After the payment of the examination fee, please download the application form, resume, examination admission ticket, examinee photo card as a PDF from the pre-registration website. Then, please print single-sided, fill-in/sign the designated sections, and submit together with other application documents shown in **"6. Application Documents, etc."** during the above-mentioned period.

When mailing the application documents, be sure to attach the mailing address label (appearing on the last page of the PDF) to the mailing envelope. If you are applying by mail, your application will need to arrive during the above period.

(Application forms are accepted between 9:00am and noon and between 1:00pm and 5:00pm, except on Saturday, Sunday and holiday.)

For those who submit a TOEIC, TOEFL or IELTS score sheet, please note that your total score will not be evaluated unless your score sheet is submitted during the designated period.

6. Application Documents, etc.

	Documents to be submitted	Notes
1	Application form / Resume / Examination admission ticket / Examinee photo card	• Fill out the form designated by HU and submit it. • Attach a photo (4cm tall x 3cm wide) to the form.
2	Statement of reason for application ※All must submit	• Fill out the form designated by HU and submit it.
3	Transcript from university (or faculty) of origin ※Submit original document	• All applicants must submit this regardless of their university or faculty of origin. • Applicants who graduated or expected to from Institute of Technology (<i>KOSEN</i>) must submit the transcript in both Regular course and Advanced Course.
4	Certificate of graduation (or expected graduation) ※Submit original document	• Students from HU's School of Engineering do not need to submit this. • If you are in category (2) in "3. Application criteria", please submit your degree (or receipt of application) certificate issued by the National Institution for Academic Degrees and Quality Enhancement of Higher Education. • Applicants in category (4) of the application criteria do not need to submit this. • The transcript needs to have been created by the president of your university (or faculty) of origin. (If you have already graduated, check that your degree details are indicated.) <u>◎If you graduated, or expect to graduate, from a university in the People's Republic of China (excluding Hong Kong and Macau), please also submit the following documents in addition to your certificate of graduation (or expected graduation).</u> Graduates: a. Electronic registration slip for transcript (教育部学历证书电子注册备案表) b. Copy of Graduation certificate (毕业证书) and transcript (学位证书) Individuals expecting to graduate: a. Online enrollment certification report (教育部学籍在线验证报告) The documents for "a." can be acquired from the Chinese Ministry of Education's certification system (中华人民共和国高等教育学历证书查询, http://www.chsi.com.cn/xlcx/bgys.jsp). Make sure the expiry date of your online certificate is 15 or more days later than the final date of the application acceptance period. • Applicants who graduated or expected to from Institute of Technology (<i>KOSEN</i>) must submit either Degree Certification by NIAD-QE (or Expected Degree Certification by <i>Kosen</i> if NIAD-QE is not issued yet).
5	TOEIC, TOEFL or IELTS score sheet ※All must submit	• Submit one of the following English scores with an examination date of August 1, 2024 or later. The submission period will be from July 21 to July 23, 2026. Only one score sheet can be submitted, even if you have received multiple scores. - i . TOEIC Listening and Reading Test Please submit the color printed "TOEIC Digital Official Score Certificate" with QR code. *For test centers unable to submit a digital official score, please submit the original copy of Official Score Certificate.

		ii . TOEFL iBT Please proceed with the direct submission process via TOEFL Access in your ETS account using the DI code below. Also, submit the photocopy of “Test Taker Score Report “. We do not use My Best score, use Test Date score only. Institutional DI code: G109 iii . IELTS Academic module Please submit the original copy of “IELTS Academic Test Report Form“. • Score sheets are not returned after they are submitted. <table><tr><th>Eligible</th><th>Ineligible</th></tr><tr><td>TOEIC Listening & Reading Test</td><td>TOEIC IP, TOEIC Speaking &Writing Tests, TOEIC Speaking Test, TOEIC Bridge Test</td></tr><tr><td>TOEFL iBT (including TOEFL iBT Special Home Edition; do not use "My Best Score".)</td><td>TOEFL ITP</td></tr><tr><td>IELTS Academic module</td><td>IELTS General Training Module</td></tr></table> Be sure to allow plenty of time when requesting your score sheet, as only the original score sheet will be considered valid proof of your score. Scores received after the application period will not be accepted.	Eligible	Ineligible	TOEIC Listening & Reading Test	TOEIC IP, TOEIC Speaking &Writing Tests, TOEIC Speaking Test, TOEIC Bridge Test	TOEFL iBT (including TOEFL iBT Special Home Edition; do not use "My Best Score".)	TOEFL ITP	IELTS Academic module	IELTS General Training Module
Eligible	Ineligible									
TOEIC Listening & Reading Test	TOEIC IP, TOEIC Speaking &Writing Tests, TOEIC Speaking Test, TOEIC Bridge Test									
TOEFL iBT (including TOEFL iBT Special Home Edition; do not use "My Best Score".)	TOEFL ITP									
IELTS Academic module	IELTS General Training Module									
6	(Required for International students only) Copy of your resident card, indicating your current address	If you are not eligible for a resident card, please submit a copy of your passport.								
7	(Required for the designated international students) A recommendation from your supervisor at the last school you attended	• Format not specified • Students from HU's School of Engineering do not need to submit this. • If you are an international student and need to submit this document by the course, you will be informed in mid-June or later. Then, please submit the documents by the designated deadline.								
8	Envelope for mailing the examination admission ticket	• Prepare an envelope (120mm x 235mm). • Download the “Label for admission ticket” from our website and print it in color. • Please write your name, address, and postal code, and paste a 410 yen stamp on the envelope. (No stamp is needed if you choose your HU lab as the mailing address.)								
	Envelope for mailing the notification of your application result. Envelope for mailing the admission documents.	• Prepare an envelope (240mm x 332mm). • Download the “Label for results notification” and “Label for admission documents” from our website and print it in color. • Please write your name, address, and postal code on the envelope. (No stamp is needed.)								

7. Documents for Preliminary Screening of Qualifications

If you are in categories (4) to (10) in the application criteria, you will need to submit the following documents in addition to those indicated in "6. Application Documents, etc.".

Your application documents for preliminary screening of qualifications need to be sealed by the supervisor you intend to study under. Be sure to allow enough time to contact this faculty member.

Application criteria	Documents to be submitted
(4)	1. Application documents for preliminary screening of qualifications (fill out the form designated by HU and submit it.) 2. Application form / Resume / Examination admission ticket / Examinee photo card (for preliminary screening purpose) 3. Certificate of university enrollment 4. All documents shown in “6. Application Documents, etc.” (you may submit the TOEIC, TOEFL or IELTS score sheet during the designated period.)

(5)	1. Application documents for preliminary screening of qualifications (fill out the form designated by HU and submit it.)
(6)	2. Application form / Resume / Examination admission ticket / Examinee photo card (for preliminary screening purpose)
(7)	3. All documents shown in “6. Application Documents, etc.” (you may submit the TOEIC, TOEFL or IELTS score sheet during the designated period.)
(8)	
(9)	1. Application documents for preliminary screening of qualifications (fill out the form designated by HU and submit it.)
(10)	2. Application form / Resume / Examination admission ticket / Examinee photo card (for preliminary screening purpose)
	3. Graduation certificate from the last school you attended
	4. Transcript from your high school or the last school you attended
	5. Statement from a party such as the head of the relevant organization at the last school you attended about your education and research history, practical experience, etc. (form optional)
	6. A description of your past education and research and your plans for research after entering the Graduate School (around 800 words, form optional)
	7. All documents shown in “6. Application Documents, etc.” (you may submit the TOEIC, TOEFL or IELTS score sheet during the designated period.)

8. Where to submit

Student Affairs Section, Administrative Division,
Graduate School of Information Science and Technology
Hokkaido University

Kita 14 Nishi 9, Kita-ku, Sapporo, Japan 060-0814

Phone +81-(0)11-706-6946 or +81-(0)-11-706-7596 Email kyomu-t[at]ist.hokudai.ac.jp (Please replace [at] to @)

9. Selection Method

Examinations (written/oral) in relevant subjects and screening of application documents, etc.

10. Examination Dates, Times and Locations

Date	Subject	Time	Location	Notes
August 24 (Mon.), 2026	Specialized subject 1	9:30am - 11:30am	Graduate School of Information Science and Technology Hokkaido University	Foreign language (English) test will not be conducted on the exam date. (We evaluate the applicants by the score of TOEIC, TOEFL or IELTS.)
	Specialized subject 2	1:00pm - 3:00pm		
August 25 (Tue.) 2026	(Oral examination) Interview	9:00am - 12:00pm	(Details on examination rooms will be posted on the day.)	

Notes on exemptions from written examinations

- ① Some applicants may be exempt from written examinations based on their transcript or other proof of proficiency.
- ② If you are exempt, you will be notified by the end of June 2026.

11. Specialized Subjects

When applying, refer to Attached Sheet 1 for details on specialized subjects in the course you have indicated in documents such as your application form.

12. Announcement of Exam Results

The examination numbers of the successful applicants will be posted on the Graduate School of Information Science and Technology website (<https://www.ist.hokudai.ac.jp/examinfo/>) at around 4:00pm on September 4 (Fri.), 2026. All examinees will also be notified of whether their application was successful.

Successful applicants will also receive documents for the matriculation procedure together with the result letter.

13. Enrollment Fee and Tuition Fee

- (1) Enrollment fee 282,000 yen
- (2) Tuition fee for 1st Semester 2027 267,900 yen (annual amount 535,800 yen)

Notes 1) If the fees change at the time of your admission or during your enrollment, the new amount will apply from the time the change is made.

2) If you do not pay their enrollment fee during the matriculation period, it will be deemed that you do not intend to enroll.

3) If it is difficult to pay for economic reasons, we have a system to apply for a fee exemption or postponement.

14. Long-term Enrollment System

An extended enrollment system is available for individuals who have less time to attend classes or research guidance than standard students due to circumstances such as employment, and are therefore unlikely to be able to complete their program in the standard number of years (two years in the case of the master's degree program). If permission is granted in your screening, you will complete your course of study over a longer period of time according to a plan. Attached Sheet 2 provides details such as criteria for application and the application procedure.

You will need to adequately consult with the supervisor you intend to study under before applying for extended enrollment.

15. Notes

- (1) Be sure to place your examination admission ticket on your desk during entrance examinations.
- (2) After submitting your application, you will not be permitted to change your intended course under any circumstances.
- (3) If there is any insufficiency in the documents, the application may be declined.
- (4) If any falsified information is found in the application documents, the applicant's admission may be revoked.

16. Privacy Policy

- (1) HU takes every effort to protect the personal information it retains, complying with the Act on the Protection of Personal Information Held by Incorporated Administrative Agencies, etc. and acting according to the Hokkaido University Regulations Concerning the Management of Personal Information.
- (2) Names, addresses and other personal information provided in applications is used for the following purposes: 1) Selection of individuals to be enrolled (processing of applications and selection of applicants), 2) notifying applicants about application results, 3) the matriculation procedure, 4) surveys and research about methods for selecting successful applicants and 5) operations associated with the preceding purposes.
- (3) Some operations involving the use of personal information may be outsourced by HU to third parties (hereinafter referred to as "contractors"). Personal information may be provided entirely or in part, but only the information necessary to perform the outsourced operations will be provided to the contractor.
- (4) Personal information provided in the applications of successful applicants will be used for the following purposes after enrollment: 1) purposes related to Student Affairs (school register, guidance on completing the course, etc.), 2) purposes related to student support (health management, scholarship applications, etc.) and 3) operations associated with tuition fees, etc.
- (5) Of the personal information handled according to (4) students' names and addresses may be used for contact purposes by the Hokkaido University Frontier Foundation and the following associations affiliated with HU: 1) the Hokkaido University Athletic Union and 2) the Hokkaido University School of Engineering Hokkokai.

17. Other Information

- (1) Please submit documents such as application forms to the Student Affairs Section in the Administrative Division of the Hokkaido University Graduate School of Information Science and Technology.
- (2) Documents such as application forms must be submitted by registered mail. Write "GRADUATE SCHOOL ENROLLMENT APPLICATION" in red.
- (3) If your enrollment application is accepted, we will send your examination admission ticket by early August 2026.
- (4) If you have a physical disability, please contact the Student Affairs Section in the Administrative Division of the Graduate School of Information Science and Technology by May 28, 2026, so that we can ensure accessibility when you are taking your entrance examinations and when you are studying with us.
- (5) Notes to foreign applicants
 - <About your visa and residential status>
 - Studying at Hokkaido University as an international student requires you to obtain a 'Student' visa. Please note in advance that the 'Certificate of Eligibility (COE)' needed for a 'Student' visa application may take more than 3 months to be issued after its application. Please refer to our university website, too.
Japanese: <https://intl-student-handbook.oia.hokudai.ac.jp/preparation/visa>
English: <https://intl-student-handbook.oia.hokudai.ac.jp/en/preparation-en/visa-en>
 - <About Security Export Control>
 - Hokkaido University conducts strict screenings on exporting goods and providing skills (including incoming international students) by establishing 'Hokkaido University Security Export Control Regulations (北海道大学安全保障輸出管理規程)' based on 'Foreign Exchange and Foreign Trade Act (外国為替及び外国貿易法)'.
 - In case you are subject to our regulations, you may be restricted from learning or researching your desired fields of education.
 - For further details of regulations regarding Security Export Control, please refer to the Ministry of Economy, Trade and Industry website below.
Ministry of Economy, Trade and Industry (METI) website: <https://www.meti.go.jp/policy/anpo/>

April 2026

Graduate School of Information Science and Technology Hokkaido University

< Contact details >

Student Affairs Section, Administrative Division,
Graduate School of Information Science and Technology
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Phone +81-(0)11-706-6946 or +81-(0)-11-706-7596
Email [kyomu-t\[at\]ist.hokudai.ac.jp](mailto:kyomu-t[at]ist.hokudai.ac.jp)
(Please replace [at] to @)

Specialized Subjects

Date/time Course	August 24 (Mon.)		Notes
	Specialized subject 1	Specialized subject 2	
	9:30am-11:30pm	1:00pm-3:00pm	
Computer Science and Information Technology	Answer 3 of the following 4 questions, including the Basic Mathematics and Computer Mathematics questions: Basic Mathematics, Computer Mathematics, Probability and Statistics (option), Information Theory (option)	Answer 2 of the following 4 questions: Algorithms and Data Structure, Artificial Intelligence, Computer Systems, Applied Mathematics	
Electronics for Informatics	Answer 3 of the following 5 questions: Applied Mathematics (Linear Algebra and Vector Analysis, Differential Equations and Laplace Transform, Fourier Series), Semiconductor Device Engineering, Electromagnetics, Electrical Circuits, Electronic Circuits (1 question each)	Answer 2 of the following 5 questions: Digital Circuits, Quantum Mechanics, Solid State Physics, Information and Communication Engineering, Optoelectronics	
Bioengineering and Bioinformatics	Write an essay (around 800 words) about bioengineering and bioinformatics and answer 1 of the following 3 questions: Linear Algebra, Electrical/Electronic Circuits, Cell Biology	Select 2 of the following 4 questions: Differential Equations, Electromagnetics, Biochemistry, Molecular Genetics	
Media and Network Technologies	Answer 2 of the following 3 questions: Applied Mathematics (Linear Algebra and Vector Analysis), Computer Engineering, Signal Processing (Fourier Analysis, z-Transform, Discrete Systems)	Select 2 of the following 4 questions: Image Processing, Language Media Understanding Theory, Communication Systems, Optical and Radio Wave Theory	
Systems Science and Informatics	Select 2 of the following 3 questions: Applied Mathematics I (Linear algebra, Vector Analysis), Applied Mathematics II (Ordinary Differential Equations, Laplace Transform, Fourier Series, Fourier Transform), Basic Informatics (Sets/Mapping, Enumeration, Graph Theory, Logic)	Select 2 of the following 4 questions: Mechanics, Electrical Circuits, Electromagnetics, Linear Control Theory	

For details on subjects, refer to <http://www.ist.hokudai.ac.jp/examinfo/master.html>.

Application Criteria and Application Procedure for Long-term Enrollment

1. Application criteria

Individuals who wish to apply for long-term enrollment must meet at least one of the following criteria.

- (1) Individuals who are in employment (public or private sector, excluding those receiving a paid leave of absence or other sufficient paid leave) or
are engaged full time in activities such as operating their own business
- (2) Individuals who are in part time employment and whose workload is deemed to be large enough to seriously impact their studies
- (3) Individuals who are engaged in duties such as child rearing or nursing care for relatives whose workload is equivalent to item 2 and is as such deemed to be large enough to seriously impact their studies
- (4) Individuals with a visual impairment, hearing impairment, limb impairment or other disability that is deemed to seriously impact their studies in the long term

2. Application procedure

If you wish to apply for long-term enrollment, please attach documents (1) to (3) below when submitting your enrollment application.

- (1) Application for long-term enrollment (Attached Form 1-1) and statement of reasons (Attached Form 2)
- (2) Study plan (Attached Form 3)
- (3) Documents, etc. to certify the need for long-term enrollment

3. Notification of decision

Your application will be screened, and you will be notified about whether your application has been approved in Mid-September 2026.

4. Number of semesters of enrollment

If you are granted long-term enrollment for the master's degree program, your period of study will be set in increments of 1 year, and will be either three or four years.

Please write your preferred length of enrollment in your long-term enrollment application form, keeping in mind that your final month of study will be in March of the applicable academic year.

5. Annual tuition fees

Annual tuition fees for long-term enrollment are calculated by dividing the total tuition fees of a standard period of enrollment by the number of years in your period of enrollment.

Please contact the Student Affairs Section in the Administrative Division of the Graduate School of Information Science and Technology for details.

6. Shortening or extending your enrollment period

After being granted long-term enrollment, you can apply to shorten or extend your enrollment period once in the event of extenuating circumstances.

(1) Shortening your enrollment period

If you were initially granted a long-term enrollment for the master's degree program, you can apply to shorten it to two years.

If you wish to shorten your period of long-term enrollment like this, you will need to submit an "Application to change enrollment period for long-term enrollment students" (Attached Form 4) and receive approval at least one year and 6months before the date on which your period of long-term enrollment is due to end.

(2) Extending your enrollment period

After being granted extended enrollment, you can apply to extend it.

If you wish to extend your enrollment period like this, you will need to submit an "Application to change enrollment period for long-term enrollment students" (Attached Form 4) and receive approval at least one year before the date on which your period of long-term enrollment is due to end.

Your new enrollment period must not be greater than four years.

- (3) If you shorten or extend your enrollment period, your tuition fees will be recalculated so that you are not paying too much or too little each semester. Please note that tuition fees that have already been paid will not be refunded.

7. Other

Please contact the Student Affairs Section in the Administrative Division of the Graduate School of Information Science and Technology to request an application form or for any inquiries.

Objectives of the Graduate School, Division, and Overview of each Course

Objectives of the Graduate School

The objectives of the Graduate School are to develop engineers with wide-ranging, deep academic knowledge and an international perspective and develop highly creative researchers who can carry out research and development independently. These objectives shall be achieved by passing on information science and technology principles and creating new ones, based on the principles of contributing to social development and building the next generation of knowledge-based societies. To achieve these objectives, the Division of Information Science and Technology comprising five courses has been established. The division focuses on information science and technology while creating new areas of research through a fusion of diverse fields to develop personnel who can make their mark in the world.

Overview of each Course

Computer Science and Information Technology course

Based on education and research of science and engineering, this course aims to understand comprehensively the vast knowledge of specialized information science by means of scientific methods including mathematical science, and, to create new social and economic value by means of engineering methods including those involving software technology and artificial intelligence. We foster the high-level engineers and researchers for achieving this purpose and conduct world-class research ourselves. Specifically, we develop education and research in the following fields: synergetic next-generation information technology, such as robots that behave intelligently in groups; theory and technology for extracting information and knowledge from vast amounts of data; theory and technology for solving problems in various fields related to nature, humans, and society by using computers; and technologies for the development and operation of information infrastructure for large-scale, highspeed data processing.

Electronics for Informatics course

This course aims to create and develop hardware technologies as a foundation for information and communication processing systems for the next generation and to foster human resources who will undertake these technologies. In other words, we conduct research and education in a wide range of the following fields: comprehensive research and development of materials, devices, circuits, and systems; the creation of new materials such as nanostructures and nanomaterials; the elucidation of quantum phenomena and the development of new electric and optical devices; the development of functional electronic and optical circuits and integrated systems using various devices; and the development of hardware that focuses on the information processing architecture and logic design needed to build next-generation systems.

Bioengineering and Bioinformatics course

This course aims to foster students who have abilities of studying in living systems from gene to individual levels and developing applications related to medicine and healthcare. In this course involving labs in bioinformatics, bioengineering, biofunctional engineering, and medical engineering fields, students can systematically learn and study the fundamentals of bioengineering and bioinformatics in advanced interdisciplinary research so that they are next generation leaders in bioengineering and bioinformatics.

Media and Network Technologies course

Aiming at the next generation of information media technology and the innovation of work and daily life, the purpose of this course is to conduct research new methods of expressing and processing of information media such as images, videos or natural language, and to develop theories and create new technologies for high-speed and ubiquitous networks using radio waves and light for transmitting information. Through collaboration among four research groups (Information Media Science and Technology, Information Communication Systems, Ubiquitous Network, and Media Network Sociology), as well as international joint education program with University of Technology

Sydney Unit of Collaborative Center for Big data and IoT, the course aims at fostering future leaders who will promote research and development and advance industry in the fields of both software and hardware for the near-future high technologies in response to the diversification of society and media forms it utilizes.

Systems Science and Informatics course

This course aims to create unique new system architecture technology by combining underlying electrical engineering, information science, and system science. Additionally, based on these technologies, we develop human resources capable of realizing advanced systems in harmony with nature. Specifically, we conduct education and research for the analysis, simulation, design, optimization, and evaluation of real-world systems such as robots, mechatronics systems, production and control systems, hardware systems, electrical energy systems, and natural environment systems. We also aim to create cyber field informatics that integrates these approaches.

Educational Objectives and Admission Policy of Master's Degree Program in the Graduate School of Information Science and Technology

Philosophy of the Graduate School of Information Science and Technology

Our school's philosophy of research and education is to contribute to the development of society and to create a knowledge-based society for the next generation. By creating and adopting the principles of information science, we aim to train engineers who have a broad and deep knowledge of this field, as well as an international sense. In this way we will cultivate highly creative scientists who independently carry out significant research and development.

Educational Objectives

Students in our master's program can choose to specialize in information science in one of five major courses of study in the Divisions of the Graduate School-- Computer Science and Information Technology, Electronics for Informatics, Bioengineering and Bioinformatics, Media and Network Technologies, or Systems Science and Informatics. In this program, we aim to educate innovation leaders who will: acquire advanced knowledge in basic and specialized fields of information science that cover the various areas studied in the above courses; create new knowledge in the field of information science; and become significant players in international research by achieving excellence in practical applications of technology and the conduct of research and development.

To obtain broad knowledge in various related fields, while focusing on information science, our students follow a backup-style curriculum, in which they take specialized subjects in accordance with the purpose of their chosen major course of study and take subjects from other courses of study as secondary subjects. In addition, we believe our students should acquire an international vision, learn to act according to global norms, and obtain knowledge in peripheral areas related to their major field of study. We offer them an education curriculum in which they can study a variety of subjects, such as specialized subjects in other majors, and they can study subjects that are common to all majors, such as subjects of project management, and International collaborative informatics subjects. Moreover, we aim for them to obtain skills as innovation leaders by offering them special lectures, training in practical technical skills, and training in communication.

Admission Policy

In the Graduate School, we accept persons who have a strong desire to acquire credits toward a Master's degree in the field of information science and who in a broad sense want to do academic work related to information science and other disciplines. This includes persons who want to study information science and other fields such as electrical engineering, electronic engineering, system engineering, mathematics, bioengineering, the life sciences, sociology, etc.

We accept persons from universities inside and outside of Japan (including prospective graduates). We are looking for persons who aim to do research and development as a career in the broad field of information science. Specifically, we select students from Japan and overseas who majored in information science as undergraduates and want to acquire a master's degree in it. The entrance examination for the master's program is a specialized exam that is conducted in English or Japanese. It tests the proficiency level of the student in each specialized area of information science deemed necessary for the master's degree course, and it consists of a written and oral test.

List of Courses, Supervisors and Research Fields

Division of Information Science and Technology

Course	Teaching staff		Research fields	Remarks
Computer Science and Information Technology 情報理工学	Professor	Itsuki Noda	マルチエージェントシミュレーション, マルチエージェント学習, 計算社会科学, RoboCup, 自然言語処理, テキストマイニング, 機械学習, ニューラルネットワーク, 人工知能応用	
	Associate Professor	Hiroki Sakaji	Multiagent simulation; multiagent learning; computational social science, RoboCup; natural language processing ; text mining; machine learning; neural networks; artificial intelligence application	
	Professor	Masahito Yamamoto	自律システム, 人工生命, 人工知能, 創発理論, 進化的計算理論, 学習理論, 適応メカニズム, 大規模組み合わせ最適化, 複雑系, 認知科学, ディープラーニング	
	Associate Professor	Yasumasa Tamura	Autonomous systems; artificial life; artificial intelligence; emergence theory; evolutionary computation theory; learning theory; adaptation mechanisms; large-scale combinatorial optimization; complex systems; cognitive science; deep learning	
	Professor	Hidenori Kawamura	人工知能, AIエージェント, マルチエージェントシステム, ディープラーニング, 機械学習, 強化学習, 画像認識, 自然言語処理, 時系列解析, 最適化・オペレーションズリサーチ	
			Artificial intelligence; AI agent; multiagent systems; deep learning; machine learning; reinforcement learning; image recognition; natural language processing; time series analysis; optimization/operations research;	
	Professor	Daisuke Sakamoto	ロボット情報学, ヒューマンエージェントインタラクション, 環境知能システム, インタラクティブシステム, ユーザインタフェイス, バーチャルリアリティ, 複合現実, 認知科学	
			Robot informatics; human-agent interaction; ambient intelligence system; interactive system; user interface; virtual reality; mixed reality; cognitive science	
	Professor	Takashi Horiyama	組合せ最適化とその応用, アルゴリズム設計論, グラフ構造, 列挙アルゴリズム, 計算幾何学, デザインと数学, 計算折り紙, 計算量理論	
	Associate Professor	Kazuhisa Seto	Combinatorial optimization and its applications; algorithm design methodology; graph structures; enumeration algorithms; computational geometry; design and mathematics; computational origami; computational complexity	
	Professor	Masaharu Yoshioka	情報検索, テキストマイニング, 推薦システム, 自然言語処理, 人工知能, 知識表現, 知識グラフ, Linked Open Data, 知識マネジメント, ケムインフォマティクス, クラウドソーシング, AI と人間の協働, 信頼される AI, マルチメディア, 深層学習	
	Associate Professor	Jiyi Li	Information retrieval; text mining; recommendation system; natural language processing; artificial intelligence; knowledge representation; knowledge graph; linked open data; knowledge management; cheminformatics; crowdsourcing, human-AI collaboration; trustworthy AI; multimedia; deep learning	
	Professor	Hiroki Arimura	データマイニング, 機械学習, 情報検索, データ構造, 文字列アルゴリズム, グラフアルゴリズム, 離散最適化, 厳密アルゴリズム, 固定パラメータアルゴリズム	
	Associate Professor	Yasuaki Kobayashi	Data mining; machine learning; information retrieval; data structures; string algorithms; graph algorithms; discrete optimization; discrete algorithms; exact algorisms; fixed parameter algorithms	
	Professor	Atsuyoshi Nakamura	機械学習, データマイニング, Web情報処理, オンライン学習, 能動学習, 信頼されるAI, 最適化, 深層学習, 確率モデル, 学習論理, 生物情報	
	Associate Professor	Dai Hai Nguyen	Machine learning; data mining; web information processing; online learning; active learning; trustworthy AI; optimization; deep learning; probabilistic models; learning theory; bioinformatics	
	Professor	Akira Tanaka	関数解析とその工学への応用, 信号処理, 機械学習, 標本化理論, 情報数理基礎学, ファジイ集合とその応用, 多値論理と代数構造	
	Specialy Appointed Associate Professor	Mayuka Kawaguchi	Functional analysis and related application to engineering; signal processing; machine learning; sampling theory; foundations of mathematical information science; fuzzy sets and related application; multiple-valued logic and algebraic structures	
	Professor	Takashi Matsubara	深層学習, 幾何学的深層学習, 科学技術機械学習, コンピュータビジョン, 生成 AI, 基盤モデル, マルチモーダル表現学習	
	Associate Professor	Ling Xiao	Deep learning; geometric deep learning; scientific machine learning (SciML); computer vision; generative AI; foundation models; multi-modal representation learning	
Professor	Masanori Sugimoto	モバイル・ユビキタスコンピューティング, 実世界メディア情報処理, 視覚・音響信号処理, 人工知能, センシング, HCI・AI 応用, インタラクティブコンピューティング		
Associate Professor	Masanari Nakamura	Mobile & ubiquitous computing; real-world media technology; visual/acoustic signal processing; artificial intelligence (AI); sensing technology; HCI/AI application; interactive computing		
Associate Professor	Hideyuki Miyahara	機械学習, 統計学, 情報統計力学、情報幾何, 統計力学、量子力学		
		Machine learning; statistics; information statistical mechanics; information geometry; statistical mechanics; quantum mechanics		
Professor	Takayuki Umeda	ハイ・パフォーマンス・コンピューティング, 並列・分散コンピューティング, コンピュータシミュレーション, 数値線形代数	情報基盤センター Information Initiative Center	
Associate Professor	Takeshi Fukaya	High-performance computing; parallel and distributed computing; computer simulation; numerical linear algebra		
Professor	Masaharu Munetomo	最適化, メタヒューリスティクス, 進化計算, システム設計, 大規模分散処理システム, クラウドコンピューティング, OS・システムソフトウェア		
Associate Professor	Akiyoshi Sugiki	optimization; metaheuristics; evolutionary computation; systems design; large-scale distributed processing systems; cloud computing; operating systems; systems software		
Professor	Katsuyoshi Iida	コンピュータネットワーク, ネットワークアーキテクチャ、通信品質, ネットワークセキュリティ, 性能評価		
		Computer networks; network architecture, communication quality, network security, performance evaluation		
Professor	Hiroyuki Minami	計算機統計学, サイバーセキュリティ, シンボリックデータ解析, インターネット工学, 関数データ解析, 分散システム		
Associate Professor	Takao Kondo	Computational statistics; cyber security; symbolic data analysis, Internet engineering, functional data analysis; distributed system		
Professor	Yasuhide Numata	計算機代数、数え上げ組み合わせ論、組合せ論的表現論、代数トポロジー的データ解析、超平面配置、計算機代数統計、代数的組み合わせ論	理学研究院 Faculty of Science	
		Computaional algebras; Groebner basis; bijective combinatorics; combinatorial representation theory; topological data analysis; hyperplane arrangements; logarithmic vector fields; algebraic statistics; algebraic combinatorics		
Professor	James Allan	人工知能、機械学習、マルチエージェントシステム、情報検索、データマイニング、ウェブ情報	国際共同教育分野（注） Int’l Joint Education (*) マサチューセッツ大学アマースト校 The University of Massachusetts Amherst	
Professor	Shlomo Zilberstein	Artificial Intelligence; machine learning; multi-agent systems; information retrieval; data Mining; web information		
(注) 北海道大学工学部情報エレクトロニクス学科情報理工学コース在籍中ではない情報理工学コース希望者は、出願前に希望研究室の教員へ連絡すること。 (Notes) Applicants wishing to join the Information Science and Engineering Course who are not currently enrolled in the Information Electronics Department, Faculty of Engineering, Hokkaido University, must contact your prospective supervisor prior to application.				

(注) 国際共同教育分野に関する研究指導等については、原則として本学専任教員との共同指導となります。
(Notes) As a general rule, research guidance in the field of international joint education will be joint guidance with the paramant faculty member(s) of the university.
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Course			Teaching staff		Research fields		Remarks	
情報エレクトロニクス Electronics for Informatics	Professor	Takao Marukame	人工知能 (AI) ・ デジタルトランスフォーメーション (DX) 向けハードウェア, 脳型コンピュータ : デバイス ・ 回路 ・ アーキテクチャ, 大規模集積アーキテクチャとメモリシステム, 新型FPGA, セキュリティ向け集積アーキテクチャ, AI向け先端デバイス, 脳 ・ 生体応用向け集積アーキテクチャ Hardware for artificial intelligence (AI)/digital transformation (DX); neuromorphic computer: device/circuit/architecture; VLSI architecture and memory system; novel FPGA; LSI architecture for information security; cutting-edge devices for AI; integrated architecture for human-brain/bio applications					
	Professor Associate Professor	Tetsuya Asai Kota Ando	人工知能集積デバイス ・ 回路 ・ アーキテクチャ, 低電力アナログ ・ デジタル集積回路, FPGAアーキテクチャ, ハードウェア指向情報処理, ニューロモルフィック (脳型) コンピューティング, 確率的コンピューティング, 非線形科学とその応用 Artificial intelligence (AI) device/circuit/architecture; low-power mixed signal LSIs; FPGA architecture; hardware-oriented information processing; neuromorphic (brain-inspired) computing; stochastic computing; nonlinear theory and its applications					
	Professor	Junichi Motohisa	ナノ構造の形成 ・ 評価とデバイス応用, 半導体ナノワイヤ, 結晶成長, ナノワイヤ電子デバイス, ナノワイヤ光デバイス, ナノ構造デバイス集積化技術と集積回路 Formation, characterization, and device application of nanostructures; semiconductor nanowires; crystal growth; nanowire-based electronic and photonic devices; integration and circuit technologies based on nanostructure devices					
	Professor	Katsuhiro Tomioka						
	Professor	Satoshi Hiura	電子 ・ 光ナノ材料, スピン光デバイス, 希薄窒化物半導体, 半導体量子ドットの作製とレーザ応用, 超高速レーザ分光, スピンダイナミクス, プロセスプラズマのモデリングと計算機解析 Electronic and photonic nanomaterials; spin-photonic devices; dilute nitride semiconductors; semiconductor quantum dots and application to lasers; Ultra – fast laser spectroscopy; spin dynamics; modeling and computer simulation of processing plasmas					
	Associate Professor	Hirotake Sugawara						
	Professor	Tetsuya Uemura	スピントロニクスデバイス, 量子ナノ構造, 次世代磁気メモリ ・ 論理回路 ・ センサー, 新規スピン物性の解明とデバイス ・ 回路応用, 金属 ・ 酸化物ハーフメタル材料の開発, ナノテクノロジー Spintronics devices; quantum nano-structures; magnetic memory/logic circuit/sensor for next generation; novel spin-related phenomenon and their device application; development of half-metallic materials (metal or oxide); nanotechnology					
	Associate Professor	Michihiko Yamanouchi						
	Professor	Kazuhisa Sueoka	表面ナノ磁性, スピン分解走査プローブ顕微鏡, 半導体 ・ 金属スピンナノデバイス, ナノセンサ ・ ナノ計測, カーボンナノチューブ ・ グラフェン ・ マルチマテリアル関連材料の物性探索と応用, 水面上単分子膜, ソフト材料 Surface nanomagnetism; spin-resolved scanning probe microscopy; semiconductor/metal spin nanodevices; nanosensors/nano-measurement; elucidation of physical properties of carbon nanotube/graphene/multi-materials and related application; langmuir monolayer; soft materials					
	Associate Professor	Takaaki Koga						
	Associate Professor	Agus Subagyo						
	Professor	Yuuki Tokunaga	量子コンピュータ, 量子通信, 量子光学, 超伝導量子コンピュータ, 光量子コンピュータ, 誤り耐性量子計算, 分散量子計算ネットワーク, 量子もつれ, ハイブリッド量子系, 原子と光の相互作用, 量子状態の測定と制御, 非線形光学 Quantum computers; quantum communications; quantum optics; superconducting quantum computers; optical quantum computers; fault-tolerant quantum computation; distributed quantum computing network; quantum entanglement; hybrid quantum systems; atom-light interactions; quantum state measurement and control; nonlinear optics					
	Specialy Appointed Associate Professor	Atsushi Okamoto★						
	Professor	Kuniharu Takei	ナノ材料デバイス, 電子デバイス, フレキシブルデバイス, プリントッドエレクトロニクス, ウェアラブルデバイス, リザパーコンピューティング, IoT, バイオエレクトロニクス Nano-material devices; electronic devices; flexible devices; printed electronics; wearable devices; reservoir computing; IoT; bioelectronics					
	Professor	Fumitaro Ishikawa	III-V半導体, 窒化物半導体, 量子ナノ構造, 強磁性体／半導体複合ナノ構造, ナノ構造の表面 ・ 界面物性, 量子デバイス, 光デバイス, 電子デバイス III-V semiconductors; nitride semiconductors; quantum nanostructures; ferromagnetic/semiconductor composite nanostructures; surface/interfacial properties of nanostructures; quantum devices; optical devices; electronic devices		量子集積エレクトロニクス 研究センター Research Center for Integrated Quantum Electronics			
Professor	Seiya Kasai	半導体電子デバイス, 生物知能電子デバイス, 確率共鳴, ゆらぎ, 半導体電気化学反応の制御と応用, ワイドバンドギャップ半導体電子デバイス, エネルギー変換素子, ゲート絶縁膜 Semiconductor electron devices; bio-inspired intelligent electron devices; stochastic resonance; fluctuation; control of semiconductor electrochemical reactions and applications; wide-bandgap semiconductor electron devices; energy conversion devices, gate dielectrics						
Associate Professor	Taketomo Sato							
Associate Professor	Zenji Yatabe							
Professor	Masayuki Ikebe	超高速 ・ 低電力デバイス ・ 回路, ミリ波 ・ テラヘルツ波回路, ブロードバンド通信システム, 電磁界解析, イメージセンサ, 感性情報処理システム, 窒化物半導体パワーデバイス Ultra-high-speed/low-power devices and circuit; millimeter wave/terahertz wave circuits; broadband communication systems; electromagnetic field analysis; image sensor; kansei information processing systems; nitride semiconductor power devices						
Associate Professor	Masamichi Akazawa							
Professor	Hiromichi Ohta	機能性酸化物エピタキシャル薄膜成長, 電気化学熱スイッチ, 熱制御デバイス, 熱電変換材料 Epitaxial thin film growth of functional oxides; Electrochemical thermal switches; Heat management devices; Thermoelectric materials		電子科学研究所 Research Institute for Electronic Science				
Professor	Hajime Nakanotani	有機光エレクトロニクス, 発光ダイオード, スピンダイナミクス, エキシトンダイナミクス, 光学顕微鏡技術, 近接場ナノイメージング ・ ナノ分光, ナノファブ리케이션, 光の軌道角運動量, プラズモニクス Organic opt-electronics; Light-emitting diode; Spin dynamics; Exciton dynamics; Optical microscopy; Near-field nano-imaging/nano spectroscopy; Nano fabrication; Orbital angular momentum of light; Plasmonics						
Associate Professor	Atsushi Taguchi							
(注) 情報エレクトロニクスコースを希望する北海道大学工学部以外の大学 ・ 学部出身の受験者は, 出願前にコース長 (竹井教授) へ連絡すること * Applicants from universities and faculties other than the Faculty of Engineering of Hokkaido University who wish to take the Information Electronics Course must contact the Course Chair (Prof. Takei) of Information Electronics before applying.								

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Cour se	Teaching staff		Research fields	Remarks
Bioengineering and Bioinformatics 生体情報工学	Professor	Hidemi Watanabe	シングルセル解析, ゲノム比較, ヒト・霊長類・植物・ウィルスゲノム, 遺伝情報解析手法, 深海底生生物探索, 生物多様性, 生物－地球間相互作用, 生命の起原, Single-cell analysis, genome comparison; human, primate, plant and virus genomes; genetic information analysis methods; search for deep-sea benthos; biodiversity; interactions between life and the earth; origins of life	
	Associate Professor	Kanako Koyanagi		
	Professor	Toshinori Endo	分子進化, 分子系統, 遺伝子発現, 正の自然淘汰, 遺伝子機能獲得, 生物・生命情報の大規模解析, 遺伝子ネットワーク, ドラッグリポジショニング, 機械学習による遺伝情報解析, ゲノム多様性解析 Molecular evolution; molecular phylogeny; gene expression; positive natural selection; evolution of gene functions; large-scale analysis of biological data; genetic networks; drug repurposing; genetic information analysis by machine learning; genome diversity	
	Associate Professor	Naoki Osada		
	Professor	Takaharu Okajima	細胞の情報物理学, 発生胚・組織の形態形成・再生医療の応用物理学, がん細胞診断, 生体の時空間揺らぎ, メカノバイオロジー, 原子間力顕微鏡の高速計測イメージング, 微細加工技術 Information physics of living cells; embryogenesis and morphogenesis; bionanotechnology; cancer cell diagnostics; spatiotemporal fluctuations in biological systems; mechanobiology; high-speed measurement and imaging using atomic force microscopy; microfabrication technology	
	Professor	Hiroshi Hirata	磁気共鳴分子イメージング, 磁気共鳴分光, 代謝イメージ, 生体イメージと画像再構成, マイクロ波計測, マイクロ波回路 Magnetic resonance molecular imaging; magnetic resonance spectroscopy; metabolic images; bioimages and image reconstruction; microwave measurement; microwave circuits	
	Professor	Shingo Matsumoto		
	Professor	Takashi Tateno	微細加工技術を用いた聴覚補償技術開発, 音声知覚の神経機構の理解, 電気・電子デバイスによる聴覚中枢系機能拡張, 物理的刺激を利用した脳活動の誘発・修飾法の開発 Developing of auditory compensation techniques on the basis of microfabrication technology; understanding neural mechanisms of speech and sound perception; functional extension and enhancement of the auditory central nervous system assisted by electrical and electronic devices; development of methods for inducing and modifying brain activity using physical stimulation techniques	
	Associate Professor	Jun Nishikawa		
	Professor	Mamoru Hashimoto	バイオフォトリクス, 非線形ラマン散乱を用いた無標識細胞・組織イメージング, 同期高速波長走査超短パルスレーザー, 無侵襲光学診断・生体モニタリング Biophotonics; label free bioimaging using coherent Raman scattering; tunable and synchronized ultrafast laser; Non-invasive optical diagnosis and biomonitoring	
	Professor	Hiroshi Ujii	蛍光・ラマン散乱をもちいたin vitro単分子イメージング, 単分子分光, 超解像顕微鏡, 薬輸送材料, 光触媒, プラズモニクス In vitro (single-molecule) fluorescence/Raman imaging; super resolution microscopy; drug delivery system; photo-catalysis; plasmonics	電子科学研究所 Research Institute for Electronic Science
	Associate Professor	Kenji Hirai		
	Professor	Yoshito Tanaka	光駆動ナノマシン, 光圧・光運動量, ナノ構造による光変調, プラズモニクス・メタマテリアル, 生体センサー, 生体ホモキラリティーの起源 Optically actuated nanomachines; Optical force / optical momentum; Light modulation by nanostructures; Plasmonics / Metamaterials; Biological sensors; The origin of biological homochirality	
	Associate Professor	Ryuichi Ohta		
	Professor	*Yoshinori Nishino	ナノ構造可視化, X線位相コントラスト生体イメージング, 超高速フェムト秒イメージング, コヒーレントX線, 放射光, 自由電子レーザー Visualization of nanostructures; X-ray phase-contrast bioimaging; ultra-high-speed femtosecond imaging; coherent X-rays; synchrotron radiation; free electron lasers	
	Associate Professor	*Akihiro Suzuki		
	Professor	Hideharu Mikami	超高速バイオイメーjing, 大規模3D蛍光イメージング, 深層学習による生体画像解析・情報抽出, 光波エンジニアリングによる光遺伝学的生体制御 High-speed bioimaging; Large-scale 3D fluorescence imaging; Biological image analysis using deep learning; Optogenetic control of living organisms by lightwave engineering	
	Visiting Professor	Masanori Kikuchi	生体材料, ティッシュエンジニアリング, 再生医工学, 三次元細胞組織体 Biomaterials; tissue engineering; regenerative medical engineering; three-dimensional cell-scaffold constructs	先端医工学分野（連携分野） Advanced Medical Engineering (Cooperative Chair) (Bioceramics Group, National Institute for Materials Science)

（注）氏名の前に*を付した教員による研究指導を希望する場合は，出願前に生体情報工学コース長（遠藤教授）へご連絡下さい。

* If you wish to study under the faculty members (marked [*])’ supervision, please contact the Course Chair （Prof. Endo） of Bioengineering and Bioinformatics before applying.

Course	Teaching staff		Research fields	Remarks
メディアネットワーク Media and Network Technologies	Associate Professor	Toshihiko Itoh	人工知能, 自然言語処理, 対話処理, 音声対話処理, 音声言語情報処理, 車載情報システム, 言語獲得, 常識獲得, 暗黙知, 感情認識・生成, ユーモア認識・生成, 機械倫理, A Iアラインメント, 認知シミュレーション	
	Associate Professor	Rzepka Rafal	artificial intelligence, natural language processing; dialogue processing; spoken-dialog processing; spoken-language information processing; in-vehicle information systems; language acquisition; common-sense acquisition; tacit knowledge; emotion recognition and generation; humor recognition and generation; machine ethics; AI alignment; cognition simulation	
	Associate Professor	Keisuke Maeda	人工知能, 生成AI, AIセキュリティ, AIとグラフィックス, 3D映像技術, XR, デジタルツイン, サイバーフィジカル, ブレイン・マシン・インターフェース Artificial intelligence; generative AI; AI security; AI and graphics; 3D video technology; XR; digital twin; cyber-physical; brain machine interface	
	Professor	Miki Haseyama	人工知能, コンピュータビジョン, マルチメディア信号処理, 画像・音楽・映像解析, スポーツ映像解析, Web/SNS解析, 情報検索/推薦, 医用画像解析, 社会インフラ維持管理技術, 地球・惑星画像解析, 脳活動解析, 生体情報解析, IoT Artificial intelligence; computer vision; multimedia signal processing; image, music and video analysis; sports video analysis; Web/SNS analysis; information retrieval and recommendation; medical image analysis; social infrastructure maintenance technology; earth and planetary image processing; brain activity analysis; bio-information analysis; IoT	
	Professor	Takahiro Ogawa		
	Associate Professor	Ren Togo		
	Professor	Yoshinori Dobashi	コンピュータグラフィックス, ビジュアルシミュレーション, 知覚情報処理, 認知科学, 実験心理学, 視覚心理, 心理物理, 認知神経科学, サウンドシミュレーション, デジタルファブ리케이션, 画像合成, 物理ベースグラフィックス, XR/メタバース Computer Graphics, Visual Simulation, Perceptual Information Processing, Cognitive Science, Experimental Psychology, Visual Psychology, Psychophysics, Cognitive neuroscience, Sound Simulation, Digital Fabrication, Image Synthesis, Physics-Based Graphics, XR/Metaverse	
	Associate Professor	Masataka Sawayama		
	Professor	Takeo Ohgane	マルチメディア通信処理, 音声情報処理, 無線通信システム, LPWAN, デジタル信号処理, 実時間画像処理, プロセッサアーキテクチャ, VLSI設計 Multimedia communication processing; speech and acoustic signal processing; wireless communication systems; low-power wide-area network; digital signal processing; real-time image processing; processor architecture; VLSI design	
	Associate Professor	Hiroshi Tsutsui		
	Associate Professor	Manabu Yamamoto	モバイル通信, 無線電力伝送, マイクロ波／ミリ波システム, 超高速3D電磁界解析, 小型アンテナ, UWBアンテナ, 電波の安全性, 人体防護, EMC Mobile communications; wireless power transfer; microwave/millimeter wave systems; ultra-high-performance 3D electromagnetic fields analysis; small antennas; UWB antennas; safety exposure; protection of the human body against electromagnetic waves; EMC	
	Associate Professor	Takashi Hikage		
	Professor	Kunimasa Saitoh	フォトニックネットワーク, 光ファイバ通信, 集積フォトニクス, ナノフォトニクス, 光エレクトロニクス, 光導波路設計論, 光電融合技術, 光MIMOシステム, 光ファイバ無線システム Photonic networks; optical fiber communication; integrated photonics; nanophotonics; optoelectronics; optical waveguide design theory; photonics-electronics convergence technology; optical MIMO system; RoF system	
	Associate Professor	Takanori Sato		
	Professor	Toshihiko Nishimura	デジタル移動通信 (スマートフォン, 5G・6G), 無線LAN, MIMOシステム, スマートアンテナ, 時空間信号処理, 圧縮センシング, 到来方向推定, OAM多重無線通信, テラヘルツ帯通信, セマンティック通信, マルチモーダル通信, チャネル知識マップ Digital mobile radio (smart phone,5G,6G); wireless LAN; MIMO systems; smart antennas; space-time signal processing; compressed sensing; DOA estimation; OAM multiplexed radio; terahertz band Communication, Semantic Communication, Multimodal Communication, Channel Knowledge Map	
	Associate Professor	Katsuya Suto		
	Visiting Professor	Hiroshi Takahashi	アクセスネットワーク, 光アクセス伝送技術, 社会インフラ, ブロードバンドサービス, モバイルネットワーク, 光無線融合技術, 光計測技術, 光ファイバセンシング, 光エンジニアリング, 国際標準化 Access networks; optical access transmission technology; social infrastructure; broadband services; mobile networks; optical-wireless cooperative technology; optical measurement technology; optical fiber sensing; optical engineering; international standardization	ユビキタスネットワーク学分野 (連携分野) Ubiquitous Network (Cooperative Chair) NTT Access Network Service Systems Laboratories NTT Communication Science Laboratories (NTT, Inc.)
	Visiting Professor	Tatsuya Shimada		
	Visiting Professor	Sanae Fujita	自然言語処理, 難易度推定, 語彙数推定, 育児・教育支援, 音響イベント検知およびシーン分類, 音声音響信号処理, 符号化, 国際標準化 Natural language processing; readability estimation; vocabulary size test; Childcare and educational support; acoustic event detection and scene classification; speech and audio signal processing; coding; international standardization	メディアネットワーク社会学分野 (連携分野) Media Network Sociology (Cooperative Chair) (NTT DOCOMO, INC.)
	Visiting Professor	Noboru Harada		
	Visiting Professor	Yoshihisa Kishiyama	モバイルネットワーク, スマートフォン, ワイヤレス通信, 非地上系ネットワーク, 国際標準化 Mobile networks; smart phones; wireless communications; non-terrestrial network, international standardization	
	Professor	Eryk Dutkiewicz	ワイヤレス通信, ネットワーク, サイバーセキュリティ, デジタル信号処理 Wireless communications; network; cyber security; digital signal processing	国際共同教育分野 (注) Int'l Joint Education (*)
	Professor	Ren Ping Liu		
	Professor	Xiaojing Huang		
	Associate Professor	Priyadarsi Nanda		
	Associate Professor	Mehran Abolhasan		
	Associate Professor	Negin Shariati Moghadam		シドニー工科大学 University of Technology Sydney

(注) 国際共同教育分野に関する研究指導等については，原則として本学専任教員との共同指導となります。
(*) Note: As a general rule, research guidance in the field of international joint education will be joint guidance with the parament faculty member(s) of the university.
★を付した教員は令和 9 年 3 月に退職予定
Supervisor marked with ★ is scheduled to retire in March 2027.

Course	Teaching staff		Research fields	Remarks
システム情報科学 Systems Science and Informatics	Specially Appointed Professor	Yuh Yamashita★	非線形制御，ロバスト制御，適応制御，遠隔制御，最適制御，ハイブリッドシステム，遺伝子ネットワーク，サイバーフィジカルシステムの制御，分散制御，確率システム Nonlinear control; robust control; adaptive control; remote control; optimal control; hybrid systems; gene networks; control of cyber-physical systems; distributed control; stochastic systems	
	Professor	Koichi Kobayashi		
	Associate Professor	Ansei Yonezawa		
	Professor	Hiroaki Date	ディジタル幾何処理，3次元CADシステム，ディジタルエンジニアリング，大規模環境計測データ処理，医療用3次元データ処理 Digital geometry processing; 3D CAD systems; digital engineering; scan data processing for large-scale environments; 3D medical data processing	
	Professor	Takayuki Tanaka	ウェアラブルロボット，パワーアシストシステム，ヒューマンインタフェース，ヒューマンモデリング，フィールドロボット wearable robots; power-assist systems; human interfaces; human modeling; field robots	
	Associate Professor	Takashi Kusaka		
	Specially Appointed Associate Professor	Fumiki Tanaka	フィールド情報学，四次元形状モデリング，加工プロセスプランニング，工作機械機構誤差モデリング，災害情報システム，がれき工学 Field informatics; 4D shape modeling; process planning; machine tool mechanical error modeling; disaster information systems; GAREKI engineering	
	Professor	So Noguchi	超伝導応用工学，計算電磁気学，ビジュアライゼーション，電気エネルギー変換，電気機器学，最適化設計，数値線形代数，数値シミュレーション，電磁材料のモデリング Applied superconductivity; computational electromagnetics; scientific visualization; electric energy conversion; electrical machinery; optimal design-; numerical linear algebra; numerical simulation; material modeling	
	Associate Professor	Shingo Hiruma		
	Professor	Hiroyuki Kita	電力システムの解析・計画・運用・監視・制御，エネルギーシステム工学，エネルギー貯蔵システム，分散電源，電力自由化・電力市場モデル，再生可能エネルギー発電，スマートグリッド，マイクログリッド，セクターカップリング，パワーエレクトロニクス技術応用 Analysis, planning, operation, monitoring and control of electric power systems; energy systems engineering; energy storage systems; distributed generations; liberalization of electric power industry/electricity market modeling; renewable energy generation system; smart grids; microgrids; sector coupling; application of power electronics technologies	
	Associate Professor	Ryoichi Hara		
	Professor	Makoto Hagiwara	パワーエレクトロニクス，電気機器，電力工学，モータドライブ，電気自動車・電動航空機，再生可能エネルギー，電池電力貯蔵システム，次世代パワー半導体デバイス，電力変換器用AI技術 Power electronics; electrical machinery; power engineering; motor drives, electric vehicles and aircrafts; renewable energy, battery energy storage systems; next-generation power devices; AI technologies for power converters	
	Professor	Atsushi Konno	ヒューマノイドロボット，手術シミュレータ，災害医療対応，ロボットマニピュレーション，ビジュアルサーボ Humanoid robots; surgical simulators; disaster medical response; robot manipulation; visual servoing	
	Associate Professor	Taku Senoo		
	Visiting Professor	Takeo Tadono	地球観測衛星，リモートセンシング，放射伝達理論，画像処理，スペクトル解析，地球環境モニタリング，空間情報利用，画像判読，情報システム Earth observation satellites; remote sensing; radiative transfer theory; image processing; spectrum analysis; global environment monitoring; use of spatial information; image interpretation; information systems	リモートセンシング情報学分野（連携分野） Informatics for Remote Sensing (Cooperative Chair) (Earth Observation Research Center Japan Aerospace Exploration Agency (JAXA))
	Visiting Associate Professor	Kei Shiomi		
	Visiting Associate Professor	Hiroshi Murakami		
	Visiting Professor	Natsuki Miyata	人間中心設計，筋骨格モデリング，人体寸法，人体形状計測，運動計測，寸法・形状データベース，傷害予防，行動シミュレーション，デジタルツイン Human-centered design; musculoskeletal models; human body dimensions; human body shape measurement; motion measurement; dimension/shape databases; injury prevention; behavioral simulation; digital twin	デジタルヒューマン情報学分野（連携分野） Informatics for Digital Human (Cooperative Chair) Digital Human Research Team, Artificial Intelligence Research Center, Department of Information Technology and Human Factors, National Institute of Advanced Industrial Science and Technology (AIST))
	Visiting Professor	Mitsunori Tada		
	Visiting Associate Professor	Yui Endo		

★を付した教員は令和9年3月に退職予定

Supervisor marked with ★ is scheduled to retire in March 2027.