

# Master's Program of the Future University Hakodate Graduate School: Outline of the Selection Process for International Students Applying for Admission in September 2026, April or September 2027

Due to unforeseen circumstances, the contents of this outline such as the exam schedule may be changed. Whenever it becomes necessary to make changes to the schedule, we will announce them on the website. If you are planning to take the exam, please check the URL below for the latest information.

URL : <https://www.fun.ac.jp/en/international-student-gs>

## 1 Recruitment of students For the Graduate School of Systems Information Science, with a specialization in systems information science

Entrance in September	A few international students will be accepted
Entrance in April	A few international students will be accepted

## 2 Application period and entrance exam dates

[Schedule A] (Enter in September 2026 or April 2027)

Period of filing application for preliminary assessment of qualifications	May 25 (Mon.) - June 1 (Mon.), 2026
Application period	June 15 (Mon.) - June 26 (Fri.), 2026
Entrance exam dates	One day during August 4 (Tue.) - 6 (Thu.), 2026
Announcement of qualified entrants	August 20 (Wed.), 2026

[Schedule B] (Enter in April or September 2027)

Period of filing application for preliminary assessment of qualifications	November 25 (Wed.) - December 2 (Wed.), 2026
Application period	January 5 (Tue.) - January 13 (Wed.), 2027
Entrance exam dates	One day during February 8 (Mon.) - 10 (Wed.), 2027
Announcement of qualified entrants	February 19 (Fri.), 2027

## 3 Site of entrance exam

Online or Onsite (Future University Hakodate)

Future University Hakodate  
116-2 Kamedanakano-cho, Hakodate, Hokkaido, Japan 041-8655

Access to Our University is available on the University's webpage. Please refer to the following URL.

URL : <https://www.fun.ac.jp/contact#1-2>

# **I Master's Program of the Future University Hakodate Graduate School: Outline of the Selection Process for International Students Applying to Enter in September 2026 or April 2027 (Schedule A)**

## **1 Recruitment of students**

### **For the Graduate School of Systems Information Science, with a specialization in systems information science**

Entrance in September 2026

A few international students will be accepted

Entrance in April 2027

A few International students will be accepted

## **2 Application period and entrance exam dates (Schedule A)**

Period of filing application for preliminary assessment of qualifications

May 25 (Mon.) - June 1 (Mon.), 2026

Application period

June 15 (Mon.) – June 26 (Fri.), 2026

Entrance exam dates

One day during August 4 (Tue.) - 6 (Thu.), 2026

Announcement of qualified entrants

August 20 (Wed.), 2026

## **3 Site of entrance exam**

Online or Onsite (Future University Hakodate)

Note: Please refer to page 1 for the details.

# **II Application and selection process**

## **1. Required qualifications of applicants**

A person who can apply for special admission to the Graduate School as an international student must satisfy all of the following conditions (1) and (2) or all of the following conditions (1) (2) and (3):

[Common for Enter in April and September]

- (1) The person must have a student visa for foreigners who study at universities in Japan, as specified in the Immigration-Control and Refugee-Recognition Act or must acquire this visa by the time of entrance to the university.

[Common for Enter in April and September]

- (2) The person must satisfy any of the following criteria:

- (a) Has graduated from Japanese university or will have graduated from Japanese university by March 31, 2027.
- (b) Has a bachelor's degree recognized by the National Institution for Academic Degrees or will receive such a degree by March 31, 2027.
- (c) Has finished 16 years of school education overseas or will have finished this schooling by March 31, 2027.
- (d) Has completed 16 years of schooling in the school education system of a foreign country by completing subjects offered through correspondence courses by a school in this foreign country while being in Japan, or will have completed such courses by March 31, 2027.
- (e) Has completed or will complete a foreign university's course of study in Japan that is recognized by the Minister of Education, Culture, Sports, Science and Technology by March 31, 2027. The course of study must be for a university whose education facilities are recognized as part of the foreign country's educational system. The completed course of study is limited to a 16-year course of study in the foreign country's school education system, such as 12 years of school and 4 years of university.
- (f) Has been or will be granted a Bachelor's degree or equivalent by completing the course by March 31, 2027. This includes the completion of a course by studying subjects through correspondence education provided by a foreign country's school in Japan or the completion of a course at an educational facility positioned by the foreign country's educational system. The previous provision in which a term of study is 3 or more years at a foreign university or other school in which comprehensive circumstances of research activities

are evaluated by the foreign country's government, organization accredited by qualified agents, or equivalent designated by the Minister of Education, Culture, Sports, Science and Technology, apply.

- (g) Has completed a professional course of study in a special training school (i.e., a school that requires four or more years to finish and satisfies criteria of the Minister of Education, Culture, Sports, Science and Technology.) The course of study the student completes should be one recognized by the Minister of Education, Culture, Sports, Science and Technology.
- (h) Is designated by the Minister of Education, Culture, Sports, Science and Technology (in accordance with Ministry of Education, Notification No. 5, 1953.)
- (i) Is recognized in this Graduate school through an assessment of the individual's qualifications and academic ability equivalent to or better than that of a university graduate. This person must be at least 22 years old by March 31, 2027.

[Only for Enter in September]

(3) The person must satisfy any of the following criteria:

- (a) Holding a status of residence as a "student" as defined by the Immigration Control and Refugee Recognition Act at the time of application
- (b) Recommended by the university as government-sponsored international students under embassy recommendation
- (c) Has obtained provisional acceptance from the university as government-sponsored international students under embassy recommendation

Note 1. Among the above, (2) (i) applies to persons who do not have any university graduate qualifications such as a degree from a junior college, a high school, technical school, a vocational school or other post-secondary school. A person who wants to apply as qualified according to the condition in (2) (i) must have his or her qualifications assessed in advance. For details, see II-3, 'Preliminary assessment of applicant qualifications.'

Note 2. For persons entering the Graduate school in September 2026, please replace March 31, 2027 with September, 2026.

## 2. Preliminary assessment of applicant qualifications

Regarding the application qualification condition (2) (i) above, persons in this category will have their qualifications assessed before they make a formal application. Persons in this category should attach the documents in (1) below to their application and make their application within the prescribed application period. At this point, it is not necessary to send payment for the fee for the entrance exam.

(1) Application documents

- i ) Application for preliminary exam of qualifications
- ii ) Curriculum vitae
- iii ) Research plan
- iv ) Transcript of grades from last school attended
  - \* A person who went to a school other than a university or junior college should submit a transcript of his/her high school grades as well as a transcript from the last school attended
- v ) A certificate of graduation or completion from the last school attended
- vi ) A statement and summary of research results
- vii ) A document summarizing results achieved at work (only for persons applying who have full-time jobs)

For points to keep in mind when filling out the various parts of the application, please see '4. Application Documents.'

(2) How to submit your application

Please submit your application as specified in '2. How to apply' in 'III. Points to keep in mind in applying.'

(3) Announcement of results of application

An applicant will be informed in writing of the results of his or her application by June 16 (Mon.), 2026. Consequently, by the last day of the application period, persons who have received permission should submit the documents from '4 Application Documents' below that they have not yet submitted.

### 3. Application Documents

Application document	Documents you must submit		Points to keep in mind when completing your application
	Applicants under criteria (2) (a) to (h)	Applicants under criterion (2) (i)	
Application slip	✓	✓	Please fill in the required items in the prescribed form, and obtain confirmation from the professor whom you plan to have as an adviser. We will send your entrance exam slip and notification of whether you qualified for admission to your address on this form. Please fill in your guarantor in your home country and your guarantor in Japan. Attach a 4cm by 3cm, frontal ID photo taken within three months before your application. Attach the photo to the appropriate place on the application form. Do not wear a hat in the photo.
Curriculum vitae	✓	Preliminary application document	Please fill in the required items in the prescribed form.
Research plan	✓	Preliminary application document	Please use the designated form downloaded from the university's website. It should be no longer than two pages. Do not change the format and font style/size. Figures and tables may be included, but must be in colors that will not be affected by black and white printing. It is allowed to insert figures and tables, and fonts in figures and tables should be the same as used in the main text. The research theme must be thoroughly discussed with an expected supervisor beforehand. In the case you cite other papers and documents, please insert the list of references at the end of the research plan. For each section there is no limit on the number of characters, but a clear and comprehensive presentation is required. Please submit a one-page research plan.
Grade transcript from last school attended	✓	Preliminary application document	Please submit this document in a sealed envelope. It should have been issued within three months before your application. Where there are courses for transfer credits, submit a list of these courses along with your grade transcript at the university you are transferring from.
Certificate of graduation (or planned graduation) from last school attended	✓	Preliminary application document	Please submit this document in a sealed envelope. It should have been issued within three months before your application.
Research results and summary	Submit if available	Preliminary application document	Any of the following achievements (1) to (4) are considered research results, and an applicant can submit more than one achievement. (1) Research paper (a paper presented at an academic conference, a graduation thesis at university or college, etc.) N.B.: For an academic conference paper, attach the abstract and certification proving you attended the conference, (2) Research report (such as final result report of a public project), (3) Document that binds design works etc. in files, (4) Software and/or hardware and its manuals developed by the applicant.  Notes: -Please attach a summary for each achievement up to 2 pages of A4 paper in any format. -If the research result was obtained by an applicant and other collaborator(s), submit a document clearly stating the applicant's role and contribution, and approved and signed by co-authors and collaborators.
Recommendation letter (Principal, president, or faculty dean of last school attended)	✓	✓	Any format is acceptable.
Adviser's recommendation letter	✓	✓	Any format is acceptable.
Document describing work results	Submit if available	Preliminary application document	Fill in the required items in the prescribed form. Only for applicant with a full-time job
Document verifying your payment of entrance exam fee	✓	✓	-
Copy of passport	✓	✓	Please submit a passport copy in which a photo of your face is recognizable.

Documents certifying level of proficiency in Japanese	Submit if available	Submit if available	-
TOEFL or TOEIC or IELTS score certification	✓ a non-native English speaker	✓ a non-native English speaker	Not necessary for applicants whose mother tongue is English

**Note: As necessary, documents other than the above may be required.**

If you are unable to submit a part of documents due to unavoidable circumstances, please consult the Education Affairs Section of the administration bureau (edu@fun.ac.jp).

#### 4. How entrants to the Graduate school are selected

Assessment of documents submitted, interviews

(\* If necessary, instead of an interview, questions can be asked by using a telecommunication tool.)

#### 5. Dates of entrance exam

The entrance exam will be held on August 4-6 (Tue. - Thu.), 2026

Regarding the interview, we will inform applicants later of the exact schedule.

### III Points to keep in mind in applying

#### 1. Pre-Consultation System

To avoid mismatches after enrollment, we require you that to confirm in advance that the prospective supervisor's research field does not significantly diverge from your own, to ascertain whether acceptance is possible, and to consult beforehand regarding your research plan. Applications for pre-consultation must be submitted by 20 days prior to the commencement date of the application period (or the application period for Preliminary assessment for applicant qualifications). For details, please refer to the following URL on our website.

URL: <https://www.fun.ac.jp/ja/admission-graduate-school/pre-consultation>

#### 2. Entrance exam fee

30,000 yen

Please make a payment of the entrance examination fee into our designated account within the period June 15 - 26 so that the total amount we receive is ¥30,000. [Must arrive within the period]

**\*Be sure to follow the payment deadline: No later than June 27.**

Please deposit the fee into the following account. Transfer fees are payable by the sender.

Bank & Branch name: AOMORIMICHINOKUBANK, HAKODATE EIGYOBU

Account number: 952-2607311

Account name: kouritsudaigakuhoujinkouritsuhakodatemiraidaigaku kenteiryō  
rijicho suzuki keiji

Note: Once the test fee has been paid, it cannot be refunded for any reason.

#### 3. How to apply

Mail or directly submit the application documents to the university.

**The documents must arrive by the final day of the application period.**

Address to send the documents:

Education/Library Affairs Section

Education/Student Affairs Division

University Office

Future University Hakodate

116-2 Kamedanakano-cho

Hakodate, Hokkaido, Japan 041-8655

Tel: 81-138-34-6421 (from overseas), 0138-34-6421 (within Japan)

If you bring your application to the university, please note that we only accept applications from 9 am to 5 pm on regular working days. The university office is closed on Saturdays, Sundays, and holidays, so we cannot accept applications brought in on these days.

#### **4. Other**

- (1) If any part of the application is missing, we cannot accept the application.
- (2) You cannot change the content of any documents after submission.
- (3) After the application documents are submitted and the entrance examination fee is transferred, they will not be returned to you. However, the fee may be refunded in the following cases:
  - a. The application has not been made (the application documents were not submitted or the application was not accepted) although the fee was transferred.
  - b. The fee has been transferred twice by mistake.
  - c. Other circumstances which the university deems necessary.In the case of either (a) or (b), the amount of money that is equivalent to the examination fee will be refunded by requesting a refund within two weeks from the last date of the application period. Please contact the Education Affairs Section of the administration bureau (edu@fun.ac.jp) when making a request.
- (4) If an applicant falsifies information on his or her application, the applicant's permission to study at the university will be revoked, even if the applicant has already entered the university.
- (5) When an applicant has a disability that requires special treatment or facilities on the entrance test or during the applicant's study at the university, the applicant should inform the university of this fact before applying.

#### **IV Points to keep in mind regarding the test**

- (1) For the interview, please go to the waiting room by the time designated and wait there until called for your interview.
- (2) Please turn off in advance any mobile phone or wearable devices you have before you enter the test room.
- (3) There is no place to buy lunch at the university on Saturdays, Sundays, and holidays, so please prepare and bring your own lunch. (There are no stores near the university that sell lunch or food.)
- (4) The university will not find lodging for you, so please independently locate accommodation.

#### **V Announcement of successful entrants**

1. Date of announcement of successful entrants August 20 (Thu.), 2026
2. How announcement of successful entrants will be made.

Successful applicants will be notified in writing.

## VI Procedures for entering the university

### 1. Period for completing procedures to enter the university

August 20 (Thu.) to September 2 (Wed.), 2026

### 2. How to complete procedures for entering the university

Please follow the 'Guide to procedures for entering the university' that is included in the letter informing you that you have qualified to enter the university's Graduate school.

#### (1) Entrance fees

Please pay the entrance fee in accordance with the payment notice included in the letter informing you of your successful entrance. Please pay within the period for completion of entrance procedures. The current amounts for the entrance fee are the following. Please note that these amounts may change in 2027.

- (a) 226,000 yen for persons from the Oshima and Hiyama districts of Hokkaido
- (b) 310,000 yen for all other persons

(Note) Any applicant or any applicant with an equivalent to a parent registered continuously as a resident of any of the cities, towns, or villages below before or from April 1, 2026 will be considered a resident of Oshima or Hiyama District.

(The applicant should submit a copy of the certificate of residence for himself, herself, or the parent at the time of carrying out the university entrance procedures.)

Oshima District:

Cities- Hakodate, Hokuto

Towns- Nanae, Matsumae, Fukushima, Shiriuchi, Kikonai, Shikabe, Mori, Yakumo, and Oshamambe

Hiyama District

Towns- Esashi, Kaminokuni, Assabu, Otobe, Okushiri, Imakane, and Setana

#### (2) Fee for injury benefit insurance for student education and research, and fee for compensation insurance for student education and research. The current amounts are as follows, but they may change in 2027.

- (a) Student education and research injury benefit insurance fee                      1,750yen (for two years)
- (b) Student education and research compensation insurance fee                      680yen (for two years)

### 3. Points to keep in mind in completing entrance procedures

- (1) Persons who do not complete the entrance procedures within the prescribed period will be refused entrance to the university.
- (2) Please confirm that you submitted all the required documents. It will be unacceptable if any are missing, and you will be unable to complete entrance procedures.
- (3) Any required documents or items that arrive after the end of the period for completing entrance procedures will not be accepted.
- (4) **Once you have sent the entrance procedure documents and entrance exam fee to the university, we cannot return either of them to you for any reason.**

## **VII Other**

### **1. Tuition**

The current amount of tuition is the following, but this amount may change in 2027.

(a) Amount (annual tuition fee) 535,800 yen

(b) Method of payment

Payment for your annual tuition will be divided evenly between the two semesters, with 267,900 yen being required for each semester. Please pay your tuition for the first semester by the end of April and your tuition for the second semester by the end of October.

### **2. Scholarships, tuition exemptions, and boarding houses and apartments**

Regarding these, please contact the person in the university office's education/student affairs division who is in charge of student affairs section. (E-mail: [stu@fun.ac.jp](mailto:stu@fun.ac.jp))

### **3. Disclosure of Screening Result**

Results of screening will be disclosed according to the applicant's request.

As a general rule, term of the disclosure is within two years after the announcement of the result. As for details of the disclosure and request method, please refer to the URL below on our website.

URL: <https://www.fun.ac.jp/en/international-student-gs>

### **4. Classes after admission**

The classes for master's program are given in Japanese or English. See the following URL for the details of the subjects: [https://www.fun.ac.jp/en/international-student-gs#G\\_Syllabus](https://www.fun.ac.jp/en/international-student-gs#G_Syllabus)

## VIII Master's program faculty advisers and their research areas, Description of research domains

### 1. List of faculty advisers for the master's program and their research areas

\* Research fields: MA: Media Architecture ICT: Advanced ICT MD: Media Design CS: Complex Systems Information  
II: Intelligent Information Systems

Faculty Member		Research domain	Research areas
Professor	ISHIO Takashi	MA ICT	Software engineering, program analysis, software visualization
Professor	ISHIGURE Yasuo	MA ICT II	e-Health, healthcare ICT, visual ergonomics, hyper realistic image communication, risk management, well-being
Associate Professor	ISHIDA Shigemi	MA ICT	Internet of things, ubiquitous computing, acoustic sensing, Wi-Fi sensing, wireless sensor networks
Professor	ITO Kiyohide	MD II	Biological psychology, psychology of visual disabilities, human interface, cognitive science
Professor	ITO Kei	MA ICT	Software engineering, information education systems, tourism informatics
Professor	INAMURA Hiroshi	MA ICT	Mobile computing, system software for smart devices, mobile/sensor network and their security
Professor	OKUNO Taku	MA ICT MD	Software engineering, web services technology
Associate Professor	OSADA Junichi	MD	Social Robot, Communication Robot, Interaction Design, UI/UX Design, Product Design, Co-Creation, Vision Design, Back Casting Approach
Professor	KATO Koji	II	Medical support system, cyber space
Associate Professor	KATO Yuzuru	CS	Nonlinear dynamics, quantum mechanics, control theory
Professor	KATORI Yuichi	CS MA II	Brain-like AI, computational neuroscience, neural network, non-linear dynamics
Professor	KANO Takeshi	II	Mathematical modeling
Professor	KAWAGUCHI Satoshi	CS	Statistical mechanics, nonlinear physics
Professor	KAWAGOE Toshiji	CS	Experimental economics, game theory, artificial markets
Professor	KANG Namgyu	MD	Sensibility science, design evaluation, information design, product design
Associate Professor	KURIKAWA Tomoki	CS	Computational neuroscience, non linear dynamics
Professor	SAITO Asaki	CS	Nonlinear science
Associate Professor	SAKAIDA Rui	MD	Cognitive science in the field, interaction analysis, ethnomethodology, qualitative social research, studies on/with first person's view
Professor	SAKURAZAWA Shigeru	CS II	Biophysics (movement of muscle protein, evolution and the origins of life, functional polymers, growth of protein crystals) man-machine interface
Professor	SATO Ikuma	MA ICT	Computer aided surgery, medical imaging technology, medical ICT, life support engineering, image processing
Professor	SATO Naoyuki	CS	Brain science, computational neuroscience, bioinstrumentation
Associate Professor	SHIMAUCHI Hirokazu	CS II	Machine Learning
Professor	JIANG Xiaohong	MA	Wireless networks, optic networks, protection of networks, mission critical networks, defense of networks and detection of attacks on them
Professor	SHIRAISHI Yoh	MA ICT II	Intelligent Transport Systems (ITS), mobility, sensing, sensor network
Professor	SHIRASE Masaaki	MA ICT CS	Information security, cryptology, fast implementation
Professor	SUZUKI Sho'ji	II	Mobile robot, vision system with large field of view, network base robot service
Professor	SUMI Kaoru	MD MA II	Affective Computing, Persuasive Technology, Human Agent Interaction, Metaverse, Interactive Digital Storytelling, Serious Games, Intelligent Systems, Artificial Intelligence
Professor	SUMI Yasuyuki	II MA MD CS	Human interface, communication, artificial Intelligence, lifelog
Associate Professor	TAKAGI Seiji	II	Physics of living systems, non-linear and non-equilibrium systems, cell motility, cellular information processing, pattern formation
Professor	TAKEGAWA Yoshinari	MA MD CS II	Human computer interaction, augmented human, educational technology, music information science, entertainment computing

Faculty Member		Research Domain	Research Areas
Associate Professor	TANAKA Yoshitaro	CS	Mathematical modeling, numerical simulation, analysis, partial differential equations, nonlocal evolution equations
Professor	TSUKADA Koji	MA ICT MD II	Human computer interaction, ubiquitous computing, interactive device, augmented commodities, prototyping, invention
Professor	TERAI Asuka	II	Cognitive science, computational cognitive modeling, cognitive neuroscience
Associate Professor	TERASAWA Kengo	MA ICT	Image processing, information search, algorithm
Professor	NAKAKOJI Kumiyo	MA MD ICT	Human-computer interaction design, collective creativity, learning experience design, museum for inspiration, data experience and engagement, software development support, creative knowledge work
Professor	NAGASAKI Takeshi	MA ICT	Computer vision, wearable systems
Professor	NAKATA Takayuki	MD II	Music perception and cognition, neuroscience of interaction, neuroscience of music
Associate Professor	NAMBU Misako	MD II	Cognitive psychology, cognitive science, human interface, interaction of human and artifacts
Professor	NIIMI Ayahiko	MA ICT CS	Data mining, database, artificial intelligence
Professor	HANADA Mitsuhiko	MD II	Visual information processing, perceptual psychology, experimental psychology, psychological data analysis
Professor	Ian FRANK	II	Artificial intelligence, game theory, explanation generation, entertainment systems, interaction
Professor	MATSUBARA Katsuya	MA ICT II	Operating system, system software, virtualization
Professor	MURAI Hajime	II MA CS	Text mining, digital humanities, bibliometrics, affective engineering, media informatics, artificial intelligence
Associate Professor	MOTOKI Tamaki	MD	Design Studies, Information Design, Content Creation
Professor	YASUI Shigeya	MD	Human interface design
Associate Professor	YAMAUCHI Sho	II	Robotics, Autonomous Robot, Artificial Intelligence, Digital Fabrication
Associate Professor	YAMADA Hiroshi	MD	Applied Linguistics, Learning Sciences
Associate Professor	YAMADA Yasufumi	CS	Biomimetic Engineering, Animal Behavior, Bio Acoustics, Ultrasonics
Professor	YOSHINAGA Natsuhiko	CS	Mathematical modelling for/by machine Learning, soft materials, nonlinear dynamics and nonequilibrium statistical physics of biological systems, modelling of pattern formation
Professor	Volodymyr RIABOV	CS	Deterministic chaos in nonlinear oscillatory systems, signal processing with applications in astrophysics and geophysics.
Professor	Damian RIVERS	II	applied linguistics, cognitive science, educational psychology, quantitative social science, structural equation modeling (SEM)
Professor	WADA Masaaki	MA ICT	IoT, fisheries informatics, marine IT

## 2. Research fields

### (1) Media Architecture

This domain seeks to realize information systems that focus on the characteristics of human beings as computer users and senders and receivers of information. In addition, in this domain we are pursuing processes to develop and build information systems with safe, effective operation. To meet these goals, in this domain we are conducting education aimed at acquisition of:

- 1) information media technology that can handle images and sound appropriate to a network society
- 2) sensing technology and information network technology to build mobile ubiquitous information systems
- 3) software development technology that can be used to quickly construct information systems in line with users' needs.

### (2) Advanced ICT (Information and Communication Technology)

This is the 6-year program unified undergraduate and graduate schools. This program intends to develop practical ability in anticipation of business management in the society, and nurtures human resources that Japanese industries are seeking, advanced software engineers who have innovative design of software to create the foundation of future social infrastructure and detailed implementation abilities, and personnel who can take an active part as project leaders in the future.

### (3) Media Design

In this domain, we are carrying out research into how humans use information technology to interact with things and the environment. Based on learning specialized fields such as information design, interactive systems, and cognitive psychology, we are researching new theories of design and interactive systems that emphasize human beings. We are aiming to develop persons who can respond to social needs by attaining the ability to design human interfaces that are easy to use and understand and to build interactive systems that are helpful and user-friendly.

### (4) Complex Systems Information Science

In this domain, we seek to understand various rich phenomena that originate in mutual interactions generated not only in the natural world, but in large-scale artificial systems. We aim at a universal understanding of these phenomena based on mathematical science and information science. With this foundation, we have taken on the challenge of developing innovative information processing technologies and are seeking to achieve a paradigm shift in our understanding of the human natural sciences. This domain strides a wide range of research fields and disciplines, such as information science, natural science, sociology, life science, etc. In this multidisciplinary domain, the objects of research are not individual elements, but the large-scale, rich mutual interactions that take place between constituent elements. For this reason, in this domain, we must not only have a deep understanding and knowledge of each discipline and field, but they must always consider these from a universal perspective as information systems.

### (5) Intelligent Information and Science

This research domain is based on mathematical science and computer science, and it gathers knowledge from a large number of interdisciplinary academic fields. In this field, we seek to explain human intelligence and build models of it, so as to achieve higher-order human intelligence through the use of computers and robots. Specifically, we aim to construct a basic theory of higher-order intelligence seen in human activities such as perception, inference, comprehension, learning, decision-making, behavior, and cooperation. Based on this theory, we seek to design, construct, and apply artificial intelligent systems, software agents, and robots.