

Tohoku University
Graduate School of Information Sciences
2016 Three-Year Doctoral Program Admission Guidelines
(April 2016 Advancement and Transfer Admissions)

Examination dates: 1-3 March 2016

November 2015

The Graduate School of Information Sciences (GSIS) consists of four departments: Computer and Mathematical Sciences, System Information Sciences, Human-Social Information Sciences and Applied Information Sciences.

GSIS aims not only to conduct cutting-edge education and research within these various academic disciplines, but also to advance wide-ranging interdisciplinary research. Students can therefore opt to engage in areas other than their original speciality. We welcome applications from ambitious individuals aspiring to create “Information Science” for the new era.’

Admission Policy

To foster individuals who can contribute to GSIS’s goal of creating “New Information Science,” we promote the acceptance of students who aim to further develop the fruits GSIS has reaped so far, students who aspire to actively pursue research across a range of disciplines, students hoping to broaden their research area, and overseas students and mature students from diverse backgrounds.

Assistance Program for Doctoral Students

As of FY2006, GSIS has been operating an assistance program for doctoral students with the aim of providing economic support and a suitable learning environment for graduate students with a high level of specialization.

<For details, please contact GSIS Educational Affairs Section [Kyoumu Kakari].>

1. Recruiting departments and selection category

Department	Number of students admitted	Additional Information
Computer and Mathematical Sciences	11	The figures shown in the left column (advancing (Note 1) / transferring students to be admitted) include the following quota; *transfer-admission selection for mature students (Note 2): 4 in each department *transfer-admission selection for overseas students, etc. (note 3): total of 7 in all the department.
System Information Sciences	11	
Human-Social Information Sciences	10	
Applied Information Sciences	10	
Total	42	

Note 1: Applicants who have completed the two-year GSIS program (master degree program) or a professional degree program and are advancing to the three-year doctoral course.

Note 2: The status of mature students is granted to those who have worked full time for more than 2 years in principle (see Note 4 below). In case that applicants have less than 2 years of work experience, those who will work full time after enrolment and meet one of the qualifications in “2. Applicants requirements” are subject to this selection (see p.6~7).

Note 3: Those eligible to apply for transfer-admission selection for overseas students, etc. are current overseas students or the students who have received education in higher educational institutions abroad, and who at the same time meet one of the requirements described in “2. Application requirements” (hereinafter referred to as “overseas students, etc.”).

2. Application requirements

- 1) Only those students who are expected to complete GSIS two-year program (master degree program) or a professional degree program in March 2016 may apply as advancing students.
- 2) In order to apply as a transfer student, applicants must satisfy one of the following prerequisites:
 - (1) Those persons who have a master’s degree or a professional degree (including those who are expected to be awarded such a degree by March 2016).
 - (2) Those persons who have acquired a degree equivalent to a master’s degree or a professional degree (including those who are expected to be awarded such a degree by March 2016) at a graduate school in another country.
 - (3) Those persons who have completed, while in Japan, a course of study through a correspondence course provided by a foreign school and have been awarded a degree equivalent to a master’s degree or a professional degree (including those who are expected to acquire such a degree by March 2016).
 - (4) Those persons who have completed a master’s course in an educational institution in Japan, which is (i) recognized under the education system of a foreign country as operating a graduate school program and (ii) otherwise designated by the Minister of Education, Culture, Sports, Science and Technology (MEXT Minister) of Japan, and have been awarded a degree equivalent to a master’s degree or a professional degree (including those who are expected to acquire such a degree by March 2016).
 - (5) Those who have completed programs in United Nations University and who have been awarded a degree comparable to a Master’s (including those who are planning to finish the enrolled program by March 2016.)
 - (6) Those who have completed programs in United Nations University (founded based on the United Nations General Assembly resolution on Dec. 11 1972, which was prescribed in paragraph 2, Article 1 of a special legislation involved with an agreement on headquarters of United Nations University between United Nations and Japan), and who have received a degree comparable to a Master’s (including those who are planning to finish the enrolled program by March 2015.)
 - (7) Those persons designated by the MEXT Minister (Public Notice of the Ministry of Education No.118 of 1989).
 - (i) University graduates who have engaged in research for two or more years at universities or research institutes, etc., and who are expected by GSIS on the basis of research results, etc., to have attained a level of scholastic achievement equivalent to or greater than those with master’s or professional degrees.
 - (ii) Those who have completed 16 years of education in a foreign country or who have completed, while in Japan, a study program equivalent to 16 years of education in a foreign country through a correspondence course provided by a school in that country, and have engaged in research for two or more years at universities or research institutes, etc., and who are expected by GSIS on the basis of research results, etc., to have attained a level of scholastic achievement equivalent to or greater than those with master’s or professional degrees.

- (8) Other students who, on the basis of an individual screening, are deemed by GSIS to have a level of scholastic attainment equivalent to or above those with master's or professional degrees, and who will be at least 24 years old by March 2016.

Note 4: "Mature students are those that have experience as technically skilled workers, teachers, researchers, etc. in public office, educational institutions and private companies, in principle. An individual can be classified as a mature student even without such previous experience. For individual cases, contact the GSIS Educational Affairs Office.

Note 5: **All those wishing to apply as transfer students should consult beforehand with GSIS Education Affairs Section and with their prospective supervisor to confirm their research plans after transfer admission.**

Note 6: As those wishing to apply under (7) or (8) above will be subject to prior documentation screening, they should consult beforehand with GSIS Educational Affairs Section and their prospective supervisor, submitting the documentation stipulated by GSIS by 18 December 2015.

3. Application deadlines

Applications must be received between 4 - 7 January 2016. The reception is open from 9:00AM to 4.30PM. Where posted applications arrive later than 8 January, only those postmarked up to 7 January will be accepted.

The mailing address:

Educational Affairs Office
Graduate School of Information Sciences Tohoku University
Aramaki-Aza Aoba 6-3-09, Aoba-ku Sendai 980-8579 JAPAN
Tel: 022-795-5814

4. Application procedure

The documents necessary for application are as follows.

For those applying for transfer admission under (7) or (8) above, the documentation submitted for screening does not need to be re-submitted. Advancement applicants do not need to pay an application fee.

1) GSIS students applying for advancement

No.	Documentation	Details
1	Advancement application form and CV	Use GSIS forms.
2	Written consent to take exam	If you are currently employed, written consent to take the entrance examination (no set format, but a company seal, etc. are required) from the head of your division. The written consent to take the entrance examination is necessary only if you will continue to be employed after entering this school.
3	Envelope for official correspondence	Use the envelope designated by GSIS. (Enter name, address, and postcode and attach a 530 yen stamp.) If you wish to receive the return envelope at a location within Tohoku University, do not attach a stamp but instead write 'Within University' in red ink.

Note 7: Where your current and proposed supervisors are different, please submit an academic transcript.

2) Transfer-admission applicants and applicants wishing to advance from other departments in Tohoku University

No.	Documentation	Details
1	Advancement/transfer application form and CV	Use GSIS forms.
2	Examination admission card and photo ID card	Use GSIS forms. (Attach to the photo ID card one photograph of yourself (head and shoulders, hatless) taken no more than three months prior to application.)
3	Certificate of (expected) completion or certificate of (expected) degree conferral, etc.	Certificate of (expected) completion issued by your university chancellor or faculty dean, certificate of (expected) master's degree issued by the National Institution for Academic Degrees and University Evaluation (NIAD-UE), or certificate of (expected) completion issued by the head of the school you last attended. Applicants with the qualification criteria specified in (6) need to provide a (expected) certificate showing that they are expected to have academic

		performance equal to or greater than those with a master's degree, instead of the certificate requested above.
4	Academic transcript (Graduate school, etc.)	Issued by your university chancellor, graduate school dean or the head of the school you last attended.
	Academic transcript (University (department), etc.)	Issued by your university chancellor or faculty dean. To be submitted only by those applying under (1), (2), (3), (4), (5) or (6).
5	TOEFL or TOEIC scoresheet ⁸	Required for applicants for the selection for overseas students, etc. of Information and Biosystems (Group 2), Machine and Intelligence (Group 3), Civil Engineering (Group 4) and applicants for general transfer-admission selection, applicants wishing to advance from other departments in Tohoku University and applicants for transfer-admission selection for overseas students, etc. of Social Sciences (Group 7). TOEFL and TOEIC examinations must have been taken no more than two years before the first day of the entrance examinations.
6	Letter of accept	Written by your prospective supervisor (no set format)
7	Master's thesis (copies also accepted)	If you have no master's thesis, please submit papers or other written work showing research results instead of master's thesis.
8	Application fee	30,000 yen (Use a postal money order*, leaving the recipient column blank.) Not required if an applicant falls under any of the following: <ul style="list-style-type: none"> • Applicant wishing to advance (applicant who has been enrolled in the Tohoku University two-year program (master degree program) or a professional degree program and is expected to graduate in March 2016. • Applicant supposed to be a government (MEXT)-sponsored exchange overseas student when accepted by GSIS. • Applicant exempt from an entrance examination fee with the support for the Great East Japan Earthquake victims.
9	Receipt and duplicate copy thereof	Use GSIS form, entering your name. Not required if an applicant falls under any of the following: <ul style="list-style-type: none"> • Applicant wishing to advance (applicant who has been enrolled in the Tohoku University two-year program (master degree program) or a professional degree program and is expected to graduate in March 2016. • Applicant supposed to be a government (MEXT)-sponsored exchange overseas student when accepted by GSIS. • Applicant exempt from an entrance examination fee with the support for the Great East Japan Earthquake victims.
10	Return envelope for examination card	Use the envelope designated by GSIS. (Clearly write name, address and postcode and attach a 372 yen stamp.) If you wish to receive the return envelope at a location within Tohoku University, do not attach a stamp but instead write "Within University" in red ink.
11	Return envelope for official correspondence	Use the envelope designated by GSIS. (Clearly write name, address and postcode and attach a 530 yen stamp.) If you wish to receive the return envelope at a location within Tohoku University, do not attach a stamp but instead write "Within University" in red ink.

* Please request this at a postal saving banks or post office savings counter, adding in both the application fee and the handling fee.

Note8: We accept a score of any of the following publicly offered standardized tests: TOEFL-PBT, TOEFL-iBT or TOEIC. We do not, however, acknowledge scores of institutionally offered TOEFL-ITP or TOEIC-IP tests. Scores of multiple tests may be submitted provided they are of different types.

Where a scoresheet is not submitted at the time of your application, your English language score will be rated at zero. The following applicants must submit a scoresheet. (see p.9-p.15)

- Information and Biosystems (group 2), Machine and Intelligence (group 3), Civil Engineering (group 4), Social Science (group 7): Applicants for general transfer-admission selection, applicants wishing to advance from other departments in Tohoku University and applicants for transfer-admission selection for overseas students, etc.

Regarding groups 1, 2 and 3, those whose native language is English need to inquire on an individual basis.

In addition to the above documentation, applicants for transfer-admission selection for mature students and applicants for transfer-admission selection for overseas students, etc. should respectively submit the following.

[Applicants for transfer-admission selection for mature students]

No.	Documentation	Details
1	Written consent to take exam	If you are currently employed, written consent to take the entrance examination (no set format, but a company seal, etc. are required) issued by the head of your division.
2	Employment certificate, etc.	An employment certificate about the employment period, content of work, and position (no set format, but a company seal, etc. are required) issued by the head of your division.
3	Statement of purpose	Areas of interest, future goals, etc. (A4 size)
4	Research plan	A4 size (around 2,000 characters)
5	Explanation of past Research	Master's thesis, your workplace research achievements, etc. (A4 size)
6	List of research Achievements	List of papers and patents. (For joint work, note the percentage of your contribution. ; A4 size)

Applicants for transfer-admission selection for overseas students, etc.

No.	Documentation	Details
1	Letter of recommendation	Written by your previous university supervisor or a person of the same position as the supervisor (no set format). Unnecessary for those who completed graduated school in Japan or for those who are expected to complete by March 2016.
2	Other	Submit papers, reports, etc., if any, that demonstrate scholastic ability.
3	Government scholarship certificate	Only overseas students on Japanese government (MEXT) scholarships at other universities (submit a Japanese government (MEXT) scholarship certificate issued by their university)
4	Written consent to take exam, employment certificate, etc.	If you are currently employed, written consent to take the examination (no set format, but a company seal, etc. are required) from the head of your division.

5. Selection method

1) Advancing students from GSIS

Selection will be based upon results from the two-year master's program and an individual assessment, etc.

2) General transfer-admission applicants, advancing students from other graduate schools of Tohoku University and applicants for transfer-admission selection for overseas students, etc.

Selection will in principle be based on a combination of written examinations, an oral examination, academic transcript and other submitted documents.

Applicants should refer to "the list of laboratories" on pp.18-21 or GSIS website

(<http://www.is.tohoku.ac.jp/entrance/>) to select the laboratory (area) to which they wish to be assigned and sit the written and oral examinations for the specialized subject group specified by that laboratory (in that area).

Subject group codes, laboratory codes and departments are shown in Table 1.

The content of examinations for each specialized subject group is shown on pp.9-15.

Where the applicant is advancing from another graduate school at Tohoku University and their prospective supervisor will be one of the persons examining their thesis, their master's program results may be sufficient to exempt them from the written examinations.

Table 1

Specialized subject group		Laboratory codes	Department
Group code	Name		
1	Mathematics	A01-1, A01-2, A02-1, A02-2, A03, A04	Computer and Mathematical Sciences
		B01-1, B01-2, B02-1, B02-2, B02-3, B03	System Information Sciences
2	Information and Biosystems	A05, A07, A08, A09, A10, A11, A13, A14, A16, A17	Computer and Mathematical Sciences
		B04, B05, B06, B07, B08, B11, B12, B13-1, B13-2, B15	System Information Sciences
		D01, D02, D04, D05, D07, D08, D10, D11, D12, D13	Applied Information Sciences
3	Machine and Intelligence	A06-1, A06-2, A12, A15-1, A15-2, A15-3	Computer and Mathematical Sciences
		B09, B10-1, B10-2, B14	System Information Sciences
		D03-1, D03-2, D09	Applied Information Sciences
4	Civil Engineering	C11-1, C11-2, C12-1, C12-2, C13-1, C13-2	Human-Social Information Sciences
5	Languages and Media	C01, C06, C14, C15	Human-Social Information Sciences
6	Psychology and Philosophy	C02, C03, C04, C05, C16	Human-Social Information Sciences
		D06	Applied Information Sciences
7	Social Sciences	C07, C08, C09, C10	Human-Social Information Sciences

* Aside from the above, the following examination methods can also be chosen.

Special method: In place of the above written and oral examinations, the applicant can produce a paper or short essay concerning their background, undergo an oral examination, and sit a foreign language examination (English). (According to the outcome of the prior documentation screening, examination by such methods may not be permitted.)

Those wishing to be examined using the above method must consult with GSIS Educational Affairs Section and their prospective supervisor to confirm the specific examination method by 18 December, 2015.

(1) Schedule for screening examinations.

Examinations will be held by specialized subject group over 1-3 March 2016 according to the schedule on pp.9-15.

(2) Place and time of examination

The details including the examination venue will be notified along with the examination admission card (to be sent). As for the time and the date of the examinations, refer to "Examination schedule and examination content for each specialized subject group." (pp.9-15)

3) Mature students

Those applying for admission as mature students should in principle have been employed for two or more years as technicians, teachers or researchers in public office, schools or companies, etc. In case that applicants have less than 2 years of work experience, only those who have a status as a researcher, teacher or technician after being transferred are subject to this selection. The aim is for mature students to exploit their workplace experience in their learning and research, refresh and advance their knowledge and skills, or to acquire knowledge and skills in new areas, advancing their creative abilities.

Screening will entail in principle a holistic assessment of the applicant's basic academic ability and work experience and research content as a working member of society based on a short essay, oral examination and documentation screening. Emphasis will also be placed on the relationship between the research area in which the candidate wishes to major and their work and research experience to date.

The examination dates, start times and the examination content for the various specialized subject groups can be found on pp.16-17. Examination venues will be the same as for (2) General transfer-admission applicants, advancing students from other graduate schools of Tohoku University and applicants for transfer-admission selection for overseas students, etc. noted above.

6. Announcement of successful applicants

The examination code numbers of successful applicants will be listed on GSIS website around 5 p.m. on 7 March 2016 (<http://www.is.tohoku.ac.jp/exam/result.html>). Applicants will also be notified of results placed in the envelope exclusively used for official communication by mail.

7. Application for Long-Term Study System

GSIS can, based on the results of a review, give permission for a student to complete their study program(Note 10) systematically over a period of more than three years, the standard completion period, in response to circumstances such as the student's having a job (Note 9) Students to whom this system is applied are called "long-term students."

GSIS will engage in consultation in relation to this system at any point in time. Details of application methods will be contained in the documentation on advancement and transfer procedures that is sent out following the announcement of successful applicants.

Note 9: Students eligible for the long-term student system are: (i) full-time employees at companies, etc., or those who are self-employed; (ii) those needing time away for childbirth, childcare or nursing care, etc.; and (iii) other persons deemed eligible by GSIS.

Note 10: The term of study cannot extend past six years. However, students can request that the permitted term of study be shortened. In principle, there will be no special curriculum set for long-term students.

8. Advancement and transfer-admission procedures

Instructions concerning the procedures and paperwork for entering the program will be sent along with the admission notification, sometime around the end of March 2014.

9. Costs

(1) Advancing students

Tuition fee (Semester 2)	267,900 yen (subject to change)
(Annual fee: 535,800 yen)	(subject to change)

(2) Transfer students

Entrance fee	282,000 yen (subject to change)
Tuition fee (Semester 2)	267,900 yen (subject to change)
(Annual fee: 535,800 yen)	(subject to change)

(For both (1) and (2))

Note 11: Tuition fees while enrolled at Tohoku University should be paid to the university through an automatic debit from a bank account held at a designated bank. The above fees are provisional, and where tuition fees are revised during your period of study, the new tuition fee will apply as of the time of revision.

Note 12: Information on exemptions from entrance and/or tuition fees or permission for delayed fee payment will be provided in the documentation on advancement or transfer-admission procedures, etc., sent out after the announcement of the examination results.

10. Notes

- (1) When submitting an application by mail, use the official application envelope and send it by express registered mail.

- (2) Application documents and the examination fee will not be returned.
- (3) If you have not received an examination admission card by 10 days before the entrance examination, please contact GSIS Educational Affairs Section.
- (4) Consultation is available for those applicants with examination or study needs. Please contact GSIS Educational Affairs Section in this regard by 18 December 2015.
- (5) When requesting application documentation by mail, please enclose a self-addressed envelope (No. 2 size, or approximately 34 cm x 24cm) on which your name, address and postal code are clearly written and a 205 yen stamp attached. If you require a brochure explaining details of the school's program, clearly write your request in red ink on a request envelope and enclose a self-addressed envelope (same size as above) with a 400 yen stamp attached.
- (6) Provided that there is a request, we will disclose the information regarding the score of the year-2016 entrance examination to those who took the exam and did not pass it. If you are interested in this disclosure system, please refer to GSIS Educational Affairs Section regarding the procedures, etc. Information on entrance examination results, etc. will only be disclosed in response to a disclosure request (prescribed request form) submitted from the entrance examinee and within the 90 days after the announcement of successful applicants.
- (7) Handling of personal information
 - (i) Personal information gathered in the course of admission screening will be used solely for the purposes of conducting admission screening, admission procedures, providing support after admission (scholarships, tuition fee exemptions, health management, etc.), education (educational guidance, etc.), and administrative activities such as collecting tuition fees.
 - (ii) Personal information gathered in the course of admission screening will be handled strictly in compliance with "the Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc." and other laws and regulations, as well as "Tohoku University Regulations on the Protection of Personal Information," and will not be disclosed or released to third parties without the consent of the person concerned.
 - (iii) It is deemed that those applying to Tohoku University Graduate School of Information Sciences have consented to the above provisions.

November 2015

Educational Affairs Office
Graduate School of Information Sciences
Tohoku University
6-3-09 Aramaki-Aza Aoba, Aoba-ku, Sendai
980-8579
Tel: 022-795-5814
<http://www.is.tohoku.ac.jp/>

Examination schedule and examination content for each subject group

April 2016

Three-Year Doctoral Program: General transfer-admission selection and examinations for advancing students from other graduate schools of Tohoku University

Group 1 Mathematics	
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on the education received at their former graduate school or their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).
Group 2 Information and Biosystems	
Written examinations *	<p>English Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of the TOEIC. When submitting TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.) Applicants whose native language is English should contact GSIS on an individual basis.</p> <p>Basic subjects 1 March 9:30-11:30 Physics and informatics: Select two out of six questions on electromagnetics, electrical circuits, fundamentals of informatics 1, fundamentals of informatics 2, fundamentals of physics 1, and fundamentals of physics 2. Medicine and biology: Select two out of five questions on fundamentals of molecular biology, fundamentals of general physiology, fundamentals of neuroendocrinology, fundamentals of pathophysiology, and fundamentals of health science.</p> <p>Note: Please enter the subjects in which you wish to be examined (physics and informatics or medicine and biology) along with the subject area (Information and Biosystems) in the application form. Please refer to the relevant departments in regard to the scope of each subject, or check on the website at this address: http://www.ecei.tohoku.ac.jp/ecei_web/admission/pastexam.html</p>
Oral examination	2 or 3 March Applicants will be notified as to the exact date and start time separately. Applicants must speak for approximately 20 minutes on the education received at their former graduate school or their master's thesis (including theses under production).

April 2016

Three-Year Doctoral Program: General transfer-admission selection and examinations for advancing students from other graduate schools of Tohoku University

Group 3 Machine and Intelligence	
Written examinations *	English Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.) Applicants whose native language is English should contact GSIS on an individual basis.
	Mathematics A 1 March 10:30-12:00 (Meeting time 10:00) Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations
	Mathematics B 1 March 13:30-15:00 Fourier series and transform, Laplace transform, partial differential equations
	Specialized subjects 2 March 9:00-12:00 (Meeting time 8:30) (Select two out of the following eight subjects. Applicants are required to give prior notice of the subjects they have chosen.) Thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics, and quantum mechanics.
Oral examination	3 March Applicants will be notified as to the exact date and start time separately. Only those who pass the written examination and those who are excused of taking the written examination are to take the oral examination. Applicants must speak for approximately 20 minutes on the education they received at their previous graduate school or their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring 13 copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

Group 4 Civil Engineering	
Oral examination	1 or 2 March Applicants will be notified as to the exact date and start time separately. Applicants must speak for no longer than 15 minutes on the education they received at their former university or their master's thesis (including theses under production). (PC projectors can be used. If you wish to use a PC projector, please contact the Educational Affairs Section beforehand.) You will be asked about your presentation, your drive and motivation, and research goals following admission, etc. On the day of the examination, bring eight copies of materials related to your presentation (presentation outline, diagrams, etc., A4 size).
Written examinations *	English Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)

April 2016

Three-Year Doctoral Program: General transfer-admission selection and examinations for advancing students from other graduate schools of Tohoku University

Group 5 Languages and Media	
Written examinations *	Specialized subjects 2 March 10:00-13:00 Answer three questions from these areas: general linguistics, syntax, semantics, morphology, semiotics, literary theory, literary hermeneutics, media, information literacy, cultural studies, German, and French. Applicants for either languages or media should ensure that they answer at least two questions from the areas designated in the book for questions respectively. Note: Applicants choosing German or French can use a dictionary. Dictionaries will be supplied by the examiner.
	Foreign language 2 March 14:30-15:30 English
Oral examination	3 March 10:00- Applicants must speak for approximately 15 minutes on the education they received at their previous graduate school and their master's thesis (including theses under production) and their desired future research after the entrance. (PC projectors can be used.) On the day of the examination, bring five copies of the materials related to your presentation (presentation outline, drawings, etc.; (A4 size).

Group 6 Psychology and Philosophy	
Written examinations *	Specialized subjects 2 March 10:00-13:00 Select two out of 12 questions from these areas: psychology (history of psychology, cognition, learning and memory, personality) and philosophy (history of philosophy) If you wish to study cognitive informatics, human learning and memory or cognitive psychology, you will be required to produce a short essay (topic to be indicated at the examination venue).
	Foreign language 2 March 14:30-15:30 English
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on the education they received at their previous graduate school and their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

Group 7 Social Sciences	
Written examinations *	English Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)
	Specialized subjects 2 March 10:00-13:00 Select one of the following categories: Sociology: select three out of five questions from the following areas: the history of sociology, contemporary society, sociology of local community, family sociology and social research methods. Politics: select three out of five questions from the following areas: political consciousness, public administration, political processes, statistics and social research methods. Economics: select three out of five questions from the following areas: microeconomics, macroeconomics, urban and regional economics, statistics and mathematics for economics. As necessary, the examiner will supply calculators. * State the name of the categories (sociology, politics, or economics) in the application, along with the name of the specific subject (Social Sciences). No change in category will be allowed after the application has been submitted.
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former graduate school and their master's thesis (including theses under production). (PC projectors can be used.) The examiners will ask questions for approximately 10 minutes. On the day of the examination, bring five copies of the materials related to your presentation (presentation outline, drawings, etc.; (A4 size).

* In each of the subject groups, applicants may be exempted from the written examinations according to the content of their academic transcripts. A TOEFL or TOEIC scoresheet must still be provided at the time of application for subject groups 2, 3, 4 and 7.

April 2016

Three-Year Doctoral Program: Transfer-admission selection for overseas students, etc.

Group 1 Mathematics	
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former graduation school and their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring five copies of the materials related to your presentation (presentation outline, drawings, etc.; (A4 size).

Group 2 Information and Biosystems	
Written examinations *	<p>Basic subjects 1 March 9:30-11:30</p> <p>Physics and informatics: Select two out of six questions on electromagnetics, electrical circuits, fundamentals of informatics 1, fundamentals of informatics 2, fundamentals of physics 1 and fundamentals of physics 2.</p> <p>Medicine and biology: Select two out of five questions on fundamentals of molecular biology, fundamentals of general physiology, fundamentals of neuroendocrinology, fundamentals of pathophysiology and fundamentals of health science.</p>
	<p>English</p> <p>Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.) Applicants whose native language is English should contact GSIS on an individual basis.</p>
	<p>Note: Please enter the subjects in which you wish to be examined (physics and informatics or medicine and biology) along with the subject group (Information and Biosystems) in the application form. Please refer to the relevant departments in regard to the scope of each subject, or check on the website at this address: http://www.ecei.tohoku.ac.jp/ecei_web/admission/pastexam.html</p>
Oral examination	2 or 3 March Applicants will be notified of the exact date and start time separately. Applicants must speak for approximately 20 minutes on the education they received at their former graduate school or their master's thesis (including theses under production).

April 2016

Three-Year Doctoral Program: Transfer-admission selection for overseas students, etc.

Group 3 Machine and Intelligence	
Written examinations *	<p>English</p> <p>Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.) Applicants whose native language is English should contact GSIS on an individual basis.</p>
	<p>Mathematics A 1 March 10:30-12:00 (Meeting time 10:00)</p> <p>Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations</p>
	<p>Mathematics B 1 March 13:30-15:00</p> <p>Fourier series and transform, Laplace transform, partial differential equations</p>
	<p>Specialized subjects 2 March 9:00-12:00 (Meeting time 8:30)</p> <p>(Select two out of the following eight subjects. Applicants are required to give prior notice of the subjects they have chosen.) Thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics and quantum mechanics</p>
Oral examination	<p>3 March</p> <p>Applicants will be notified of the meeting time separately.</p> <p>Only those who have passed the written examination or who were exempt from that examination will be eligible for the oral examination. Applicants must speak for approximately 20 minutes on the education they received at their former university or their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring 13 copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).</p>

Group 4 Civil Engineering	
Oral examination	<p>1 or 2 March</p> <p>Applicants will be notified as to the exact date and start time separately.</p> <p>Applicants must speak for no more than 15 minutes on the education they received at their former graduate school and their master's thesis (including theses under production). (PC projectors can be used. If you wish to use a PC projector, please contact the Educational Affairs Section beforehand.) Applicants will be asked questions on their presentation, drive and motivation, and research goals after admission. On the day of the examination, bring eight copies of materials related to your presentation (presentation outline, blueprints, etc.; A4 size).</p>
Written examinations *	<p>English</p> <p>Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)</p>
	<p>Specialized subjects 1 March 13:00-15:00</p> <p>There will be a written examination taking account of the specialization of the applicant.</p> <p>Notes</p> <p>(1) As for the area of the specialization, choose three questions out of four offered.</p> <p>(2) As for the content of the area of the specialization, consult the faculty member who is expected to be the academic advisor.</p>

April 2016

Three-Year Doctoral Program: Transfer-admission selection for overseas students, etc.

Group 5 Languages and Media	
Written examinations *	Specialized subjects 2 March 10:00-13:00 Answer two questions from these areas: general linguistics, syntax, semantics, morphology, semiotics, literary theory, literary hermeneutics, media, information literacy, cultural research, German, and French. Applicants for either languages or media should ensure that they answer questions from the areas designated in the book for questions respectively. Note: Applicants choosing German or French can use a dictionary. Dictionaries will be supplied by the examiner.
	Foreign languages 2 March 14:30-15:30 English or Japanese
Oral examination	3 March 10:00- Applicants must speak for approximately 15 minutes on the education they received at their former graduate school and their master's thesis (including theses under production) and their desired future research after the entrance. (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size). Overseas students from Tohoku University do not need to give a presentation, but they will be asked about their master's thesis (including those under production) and their research goals following transfer, etc.

Group 6 Psychology and Philosophy	
Written examinations *	Specialized subjects 2 March 10:00-13:00 Select two out of 12 questions from these areas: psychology (history of psychology, cognition, learning and memory, personality) and philosophy (history of philosophy). If you wish to be assigned to either of the following labs (cognitive informatics, human learning, memory or cognitive psychology and communication psychology), you will be required to produce a short essay (topic to be indicated at the examination venue).
	Foreign languages 2 March 14:30-15:30 English and Japanese
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former graduate school and their master's thesis (including theses under production). (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size). Overseas students from Tohoku University do not need to give a presentation, but they will be asked about their master's thesis (including those under production) and their research goals following transfer, etc.

Group 7 Social Sciences	
Written examinations *	<p>English</p> <p>Applicants must provide at the time of application their original TOEFL or TOEIC scoresheet from an examination taken no more than two years before the first day of the entrance examinations. The scoresheet is the Examinee's Score Record in the case of TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that ETS sends it to GSIS by the final time of application. (For mailing, GSIS's DI code is 2149.)</p>
	<p>Specialized subjects 2 March 10:00-13:00</p> <p>Select one of the following categories:</p> <p>Sociology: Select three out of five questions from the following areas: the history of sociology, contemporary society, urban sociology, rural sociology and family sociology. (Examination method: Short essay)</p> <p>Politics: Select three out of five questions from the following areas: political consciousness, modern political thought, public administration, political processes, political systems, and comparative politics. (Examination method: Short essay)</p> <p>Economics: Select two out of four questions from the following areas: microeconomics, macroeconomics, urban economics, regional economics, statistics, econometrics, and mathematics for economics and write a short essay.</p> <p>Questions may be answered in English. As necessary, the examiner will supply calculators.</p> <p>* State the name of the categories (sociology, politics, or economics) in the application, along with the name of the specific subject (Social Sciences). No change in category will be allowed after the application has been submitted.</p>
Oral examination	<p>3 March 10:00-</p> <p>Applicants must speak for approximately 20 minutes on the education they received at their former university and their master's thesis (including theses under production). (PC projectors can be used.) The examiners will ask questions for approximately 10 minutes. On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size). Presentations can be given in English.</p>

* In each of the subject groups, applicants may be exempted from the written examinations according to the content of their academic transcripts. A TOEFL or TOEIC scoresheet must still be provided at the time of application for subject groups 1, 2, 3, 4 and 7.

April 2015

Three-Year Doctoral Program: Transfer-admission selection for mature students

Group 1 Mathematics	
Oral examination	3 March 13:30- Applicants will be notified as to the exact date and start time separately. Applicants must speak for approximately 20 minutes on their main area of mathematical research either at their workplace or on a personal basis. (PC projectors can be used.) On the day of the examination, bring five copies of an outline of your presentation and your research goals following admission (A4 size).

Group 2 Information and Biosystems	
Oral examination	2 March Applicants will be notified as to the exact date and start time separately. Applicants must speak for approximately 20 minutes on their research (work) to date and their research goals following admission, etc.

Group 3 Machine and Intelligence	
Written examinations *	Choose two out of 10 subjects from Mathematics A, Mathematics B and specialized subjects. (Notify GSIS of these in advance.) The time at which the written examination finishes for specialized subjects will vary according to the subject chosen.
	Mathematics A 1 March 10:30-12:00 (Meeting time 10:00) Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations
	Mathematics B 1 March 13:30-15:00 Fourier series and transform, Laplace transform, partial differential equations
	Specialized subjects 2 March 9:00-12:00 (Meeting time 8:30) Thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics, quantum mechanics
Oral examination	3 March Applicants will be notified of the meeting time separately. Only those who have passed the written examination or who were exempt from that examination will be eligible for the oral examination. Applicants must speak for approximately 15 minutes on their research to date and their research goals after admission. (PC projectors can be used.) On the day of the examination, bring 13 copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size). Your English ability may also be subject to evaluation.
	Note: Some applicants may be exempted from the written examinations as a result of prior screening of their documentation. For details, please contact Machine and Intelligence educational affairs section. Contact point: Machine and Intelligence educational affairs officer Tel: 022-795-7030

April 2016

Three-Year Doctoral Program: Transfer-admission selection for mature students

Group 4 Civil Engineering	
Short essay	1 March 9:30-11:00 A theme on civil engineering
Oral examination	1 March 13:00- Applicants must speak for no more than 15 minutes on their research or work at their workplace. (PC projectors can be used. If you wish to use a PC projector, please contact the Educational Affairs Section beforehand.) On the day of the examination, bring eight copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

Group 5 Languages and Media	
Short essay	2 March 10:00-11:30 The applicant must answer the essay question given on the examination day.
Oral examination	3 March 10:00- Applicants will be notified as to the time of the examination separately. Applicants must speak for approximately 15 minutes on their research or work at their workplace and future research project. (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

Group 6 Psychology and Philosophy	
Short essay	2 March 10:00-11:30 Theme to be indicated on the day of the examination.
Oral examination	3 March 10:00- Applicants must speak for approximately 20 minutes on their research or work at their workplace and their research plans after admission. (PC projectors can be used.) On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

Group 7 Social Sciences	
Short essay	2 March 10:00-13:00 Select one of the themes indicated at the time of the examination and produce a short essay. Themes will relate to proposed research areas across sociology, politics and economics.
Oral examination	3 March Applicants will be notified of the time of the examination separately. Applicants must speak for approximately 20 minutes on their research or work at their workplace. (PC projectors can be used.) The examiners will ask questions for around 10 minutes. On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

List of laboratories (areas) within Tohoku University Graduate School of Information Sciences 2016

* For details on the research, etc., at these laboratories (areas), please see GSIS's website at:

<http://www.is.tohoku.ac.jp/entrance>

Group code	Group	Division	Laboratory (Area)	Lab. code	Staff	Department
1	Mathematics	Mathematical Structures	Mathematical Structures I	A01-1	Prof. Akihiro MUNEMASA	Computer and Mathematical Sciences
				A01-2	Assoc. Prof. Hiroki SHIMAKURA	
			Mathematical Structures II	A02-1	Prof. Toshiyuki SUGAWA	
				A02-2	Assoc. Prof. Hajime TANAKA	
			Mathematical Structures III	A03	Prof. Hitoshi MURAKAMI	
			Mathematical Structures IV	A04	Prof. Hiromi SENO	
		Mathematical System Analysis	Mathematical System Analysis I	B01-1	Prof. Masaaki HARADA	System Information Sciences
				B01-2	Assoc. Prof. Jun MASAMUNE	
			Mathematical System Analysis II	B02-1	Prof. Nobuaki OBATA	
				B02-2	Assoc. Prof. Reika FUKUIZUMI	
				B02-3	Assoc. Prof. Etsuo SEGAWA	
			Mathematical System Analysis III	B03	Prof. Shigeru SAKAGUCHI	
2	Information and Biosystems	Applied Mathematical Science	Statistical Physics	A05	(Currently vacant)	Computer and Mathematical Sciences
		Computation Science and Systems	Computation Science and Systems Computation Theory	A07	(Currently vacant)	
			Computer Structures	A08	Prof. Takafumi AOKI Assoc. Prof. Naofumi HOMMA	
			Intelligent Integrated Systems	A09	Assoc. Prof. Masanori HARIYAMA	
		Software Science and Systems	Firmware Science	A10	(Currently vacant)	
			Foundations of Software Science	A11	Prof. Eijiro SUMII Assoc. Prof. Kazutaka MATSUDA	
		Logic for Information Science	Logic for Information Science	A13	Prof. Yoshihito TOYAMA** Assoc. Prof. Takahito AOTO	
		Communication Theory	Communication Theory	A14	Prof. Tetsuo KINOSHITA Assoc. Prof. Gen KITAGATA	
		Information Security	Information Security	A16	Prof. Hiroki SHIZUYA Assoc. Prof. Masao SAKAI Assoc. Prof. Shuji ISOBE	

		Environmental Informatics	Environmental Informatics	A17	Prof. Jun-ichi KUDOH	
		Intelligent Information Science	Algorithm Theory	B04	Prof. Xiau. ZHOU Assoc. Prof. Takehiro ITO	System Information Sciences
			Intelligent Systems Science	B05	Prof. Ayumi SHINOHARA	
			Communication Science	B06	Prof. Kentaro INUI Assoc. Prof. Naoaki OKAZAKI	
		Biosystem Information Sciences	Information Biology	B07	Prof. Keiichi ITOI	
			Design and Analysis of Information Systems	B08	Prof. Takeshi TOKUYAMA Assoc. Prof. Jinhee CHUN	
		Acoustic Information	Acoustic Information	B11	Prof. Yo-iti SUZUKI Assoc. Prof. Shuichi SAKAMOTO	
		Visual Cognition and Systems	Visual Cognition and Systems	B12	Prof. Satoshi SHIOIRI Assoc. Prof. Ichiro KURIKI	
		Information Contents	Information Contents	B13-1	Prof. Yoshifumi KITAMURA	
				B13-2	Assoc. Prof. Terumasa AOKI	
		Software Construction	Software Construction	B15	Prof. Atsushi OHORI	
Information and Biosystems		Information and Applied Technology	Physical Fluctuomatics	D01	Prof. Kazuyuki TANAKA Assoc. Prof. Yuji WAIZUMI	Applied Information Sciences
			Information Technology	D02	Prof. Nei KATO Assoc. Prof. Hiroki NISHIYAMA	
		Applied Informatics for Human and Life Sciences	Systems Bioinformatics	D04	Prof. Kengo KINOSHITA Assoc. Prof. Takeshi OOBAYASHI	
			Biomodeling	D05	Prof. Mitsuyuki NAKAO Assoc. Prof. Norihiro KATAYAMA	
		Applied Intelligence Software	Applied Intelligence Software	D07	Prof. Takuo SUGANUMA Assoc. Prof. Toru ABE	
		Information Network Systems	Information Network Systems	D08	Prof. Hideaki SONE Assoc. Prof. Takaaki MIZUKI	
		Brain Function Integration	Brain Function Integration	D10	(Currently vacant)	
		Health Informatics	Health Informatics	D11	Prof. Yoshitaka KINOCHI Prof. Chihiro ITO Assoc. Prof. Shin OGAWA Assoc. Prof. Kimio SATO	

		Statistical Science for Complex systems	Statistical Science for Complex systems	D12	Prof. Atsushi YOSHIMOTO Assoc. Prof. Yumi TAKIZAWA Assoc. Prof. Fumikazu MIWAKEICHI		
		Biomedical Information analysis	Biomedical Information Analysis	D13	Prof. Masao NAGASAKI Assoc. Prof. Riu YAMASHITA		
3	Machine and Intelligence	Applied Mathematical Science	Mathematical Modeling and Computation	A06-1	Prof. Satoru YAMAMOTO	Computer and Mathematical Sciences	
				A06-2	Assoc. Prof. Kentaro SANO		
		Software Science and Systems	Computer Architecture	A12	Prof. Satoru YAMAMOTO Assoc. Prof. Hiroyuki TAKIZAWA		
		Ultra-Highspeed Information Processing	Ultra-Highspeed Information Processing	A15-1	Prof. Hiroaki KOBAYASHI		
				A15-2	Assoc. Prof. Hideaki GOTO		
				A15-3	Assoc. Prof. Ryusuke EGAWA		
		Intelligent Robotics	Image Analysis	B09	Prof. Takayuki OKATANI		System Information Sciences
			Intelligent Control Systems	B10-1	Prof. Koichi HASHIMOTO		
				B10-2	Assoc. Prof. Shingo KAGAMI		
		Integrated Fluid Informatics	Integrated Fluid Informatics	B14	Assoc. Prof. Jun ISHIMOTO		
Information and Applied Technology	Human-Robot Informatics	D03-1	Prof. Satoshi TADOKORO	Applied Information Sciences			
		D03-2	Assoc. Prof. Masashi KONYO				
Flow System Informatics	Flow System Informatics	D09	Prof. Yuji HATTORI				
4	Civil Engineering	Infrastructure Planning	Transportation and Geographic Information Science	C11-1	Prof. Masao KUWAHARA	Human-Social Information Sciences	
				C11-2	Assoc. Prof. Ryo INOUE		
			Regional and Urban Planning	C12-1	Prof. Tatsuhito KONO		
				C12-2	Assoc. Prof. Junya FUKUMOTO		
			Road Transportation and Traffic	C13-1	Prof. Takashi AKAMATSU		
				C13-2	Assoc. Prof. Shunsuke HAYASHI		
5	Languages and Media	Human Information Science	Language and Information Science	C01	Assoc. Prof. Akira KIKUCHI	Human-Social Information Sciences	
			Verbal Text Analysis	C06	Prof. Yoshiki OGAWA Assoc. Prof. Akiko NAGANO		
		Media and Information Science	Media and Culture	C14	Prof. Tatsuya HORITA Senior Assis. Prof. Kuniko SAKATA		

			Media and Semiotics	C15	Assoc. Prof. Shunichi KUBO Assoc. Prof. Naoko MORITA	
6	Psychology and Philosophy	Human Information Science	Human Learning and Memory	C02	(Currently vacant)	Human-Social Information Sciences
			Cognitive Psychology	C03	Assoc. Prof. Yuichi WADA	
			Philosophy of Human Information	C04	Prof. Ichiro MORI	
			Philosophy of Logical Analysis	C05	Assoc. Prof. Kazuhisa SINOZAWA	
		Cognitive Psychology of Communication	Cognitive Psychology of Communication	C16	Prof. Toshiaki MURAMOTO	
		Applied Informatics for Human and Life Sciences	Cognitive Psychology	D06	(Currently vacant)	Applied Information Sciences
7	Social Sciences	Socio-Political Information Science	Theory of Social Structure and Change	C07	Prof. Kazuho KOBAYASHI* Assoc. Prof. Naohito TOKUGAWA	Human-Social Information Sciences
			Political Informatics	C08	Assoc. Prof. Kazunori KAWAMURA	
		Socio-Economic Information Science	Socio-Economic Analysis of Urban System	C09	Prof. Dao-Zhi ZENG Assoc. Prof. Ryo ITOH	
			Econometric System Analysis	C10	Prof. Asao ANDO*	

* Teaching staff due to retire in March, 2017.

** Teaching staff due to retire in March, 2018.