

Tohoku University
Graduate School of Information Sciences
2016 Two-Year Master's Program Admission Guidelines
(April 2016 Admissions)

Examination dates: 26-28 August 2015

June 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 to be admitted	Additional Information
Computer and Mathematical Sciences	38	The figures shown in the left column includes the following quota : Regarding mature students: 4 for each department (Note1) Regarding overseas students etc.: 10 for all departments (Note 2). Those figures also include 10 slots assigned for special selective admission upon recommendation.
System Information Sciences	37	
Human-Social Information Sciences	30	
Applied Information Sciences	35	
Total	140	

Note 1: 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) as well as to those who meet one of the qualifications described in “2. Application requirements.” (See p.5)

Note 2: Those eligible for taking the entrance exam as overseas students 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

In order to apply as applicants, prospective students must satisfy one of the following prerequisites:

- (1) University graduates (including those who are expected to graduate by March 2016).
- (2) Those persons who have been awarded a bachelor's degree under the provisions of National Institution for Academic Degrees and University Education (including those who are expected to be awarded this degree by March 2016).
- (3) Those persons who have completed 16 years of education in a foreign country (including those who are expected to have completed this by March 2016).
- (4) Those persons who have completed a curriculum equivalent to 16 years of school education in a foreign country by finishing in Japan a correspondence course operated by a school in that country (including those who are expected to complete this by March 2016).
- (5) Those persons who have completed a university program in an educational institution in Japan, which is (i) recognized under the education system of a foreign country as operating a university program (graduates must be recognized as equivalent to those completing 16 years of education in that country) and (ii) otherwise designated by the Minister of Education, Culture, Sports, Science, and Technology (MEXT Minister) of Japan (including those who are expected to complete such a course by March 2016).
- (6) Those persons who have completed a specialist program at a vocational school (restricted to those programs meeting standards prescribed by the MEXT Minister, including the condition of a study period of at least four years) that has been otherwise designated by the said Minister, where the prospective student has completed the course since the date stipulated by the Minister (including those who are expected to complete such a course by March 2016).
- (7) Those persons designated by the MEXT Minister (please refer to Public Notice of the Ministry of Education No.5 of 1953).
- (8) Those persons who have been admitted to the graduate school of another university according to Article 102 (2) of the School Education Law, and in the opinion of GSIS, have attained a sufficient standard of achievement.
- (9) Other persons who will be at least 22 years old by March 2016 and who are expected based on an individual GSIS screening, to have a level of scholastic attainment equivalent to or above that of a university graduate.

Note 3: The application qualifications stipulated under Article 102 (2) of the School Education Law and Article 11 (8) of Tohoku University Graduate School Regulations are not applicable to “those who have studied at university for at least three years, those who have completed 15 years of school education in a foreign country, those who have completed 15 years of education in a foreign country by finishing in Japan a correspondence course operated by a school in that country, and those who have completed a university course in Japan at an educational facility, which is (i) recognized under the education system of a foreign country as operating a university program (graduates must be recognized as equivalent to completing 15 years of education in that country) and (ii) otherwise designated by the MEXT Minister, and who have been recognized by GSIS as having attained the necessary credits with outstanding results.”

Note 4: “Mature students” are those who 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 GSIS Educational Affairs Office.

Note 5: All overseas applicants and mature students must engage in prior consultation with their prospective supervisors to discuss their post-admission research plans.

Note 6: Prospective students with qualifications (8) or (9) who wish to apply as mature or overseas students will be subject to our prior documentation screening. Therefore, they should consult first with GSIS Educational Affairs Section and their prospective supervisor, and submit the documentation stipulated by GSIS by 23 June 2015.

3. Application deadlines

Applications must be received between 9-15 July 2015. The reception is open from 9:00AM to 4:30PM. Where posted applications arrive later than 16 July, only those postmarked up to 15 July will be accepted.

Receipt of applications/mailling address:

Educational Affairs Section,
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.

No.	Documentation	Details
1	Application form and CV	Use GSIS forms.
2	Supervisor request	Use GSIS form.
3	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.)
4	Certificate of graduation, certificate of (expected) degree conferral, certificate of (scheduled) application for degree or certificate of (expected) Completion	Certificate of (expected) graduation issued by your university chancellor or faculty dean, certificate of (expected) bachelor's degree issued by the National Institution for Academic Degrees and University Evaluation (NIAD-UE), certificate of (scheduled) application for degree issued by your two-year college or technical school chair, etc. or certificate of (expected) completion issued by the head of the school you last attended
5	Academic transcript	Issued by the chancellor of your former university, your faculty dean, or the head of the school you last attended, etc.
6	TOEFL or TOEIC Scoresheet (Note 7)	Required for applicants for selection for overseas students, etc. of Mathematics (Group 1), and for applicants for general selection and selection for overseas students, etc. of Information and Biosystems (Group 2), Machine and Intelligence (Group 3), Civil Engineering (Group 4) and Social Sciences (Group 7). TOEFL and TOEIC examinations must have been taken no more than two years before the first day of the entrance examination.
7	Examination fee	30,000 yen (Use a postal money order*, leaving the recipient column blank) Not required if the following conditions are applicable: -Being supposed to be a government (MEXT)-sponsored exchange overseas student when entering GSIS. -Being exempt from an entrance examination fee with the support for the Great East Japan Earthquake victims.
8	Receipt and duplicate copy thereof	Use GSIS form, entering your name. Not required if you are supposed to be a government (MEXT)-sponsored exchange overseas student when entering the GSIS.

9	Return envelope for examination card	Use the envelope designated by GSIS. (Clearly write name, address and postcode and attach a 372 yen stamp.)
10	Envelope for official correspondence	Use the envelope designated by GSIS. (Clearly write name, address and postcode and attach a 372 yen stamp.)
11	Other	1) Submit papers, reports, etc., if any, that demonstrate scholastic ability. 2) Mature students (see Note 4 below) and overseas students (see Note 2 below) who prefer to take the general entrance examination instead should submit “a certificate (of no specified form) (a document in which research programs, etc. are confirmed),” composed by the faculty member projected to be in charge of the students.

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

Note 7: We accept a score of any of the following publicly offered standardized tests: TOEFL-iBT, TOEFL-PBT 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 (by the final day of the period for application acceptance), your English language score will be rated at zero. The following applicants must submit a scoresheet. For further details, please see pp. 8-15.

- Mathematics (group 1): Applicants for selection for overseas students, etc.
- Information and Biosystems (group 2), Machine and Intelligence (group 3), Civil Engineering (group 4), Social Science (group 7): Applicants for general selection and the applicants for selection for overseas students, etc.

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

Regarding the applicants for mature student selection and the applicants for selection for overseas students, etc., in addition to the above documentation, please submit the following as appropriate.

[The applicants for mature student selection]

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) from 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 company seal, etc. are required) issued by the head of your division.
3	Letter of acceptance	Written by your prospective supervisor (no set format)
4	Statement of purpose	Areas of interest, research plan, future goals, etc. (A4 size)
5	Graduation thesis, etc.	Graduation thesis, content of your university or other research, job description, etc. (A4 size)

[The applicants for selection for overseas students, etc.]

No.	Documentation	Details
1	Letter of acceptance	Written by your prospective supervisor (no set format)
2	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 graduated from a university in Japan or for those who are expected to graduate by March 2016.
3	Proof of Japanese language proficiency	Written by your supervisor or the equivalent (no set format)
4	Government scholarship certificate	Only overseas students on government (MEXT) scholarships at other universities should submit a Japanese government (MEXT) scholarship certificate issued by their university.
5	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 needed) issued by the head of your division is required.

5. Selection method

Selection will in principle be based upon a combination of written examinations (in the case of mature students, short essay, etc.), an oral examination, their academic transcript and other submitted documents.

1) General selection and selection for overseas student, etc.

Applicants should refer to “the list of laboratories (areas)” on pp.18-21 or GSIS’s website (<http://www.is.tohoku.ac.jp/entrance/>) to select their first choice in terms of laboratory (area) 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.8-15.

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	C-11-1, C-11-2, 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.

Method 1: Taking the written examinations for another specialized subject group.

Method 2: Take the written examinations for a subject that is not in GSIS’s specialized subject groups (not possible for all subjects).

Method 3: In place of the above written and oral examinations, the applicant can produce a paper 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 methods must consult with GSIS Educational Affairs Section and their prospective supervisor to confirm the specific examination method by 23 June, 2015.

(1) Schedule for entrance examinations

Examinations will be held by specialized subject group over 26-28 August 2015 according to the schedule on pp.8-15.

(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” (p.8).

2) Mature student selection

Those applying for admission as a mature student should in principle have been employed for two or more years as technicians, teachers or researchers in public office, schools or companies, etc. 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.

- * Short essay, etc. and oral examination schedule: The examination dates and start times for the various specialized subject groups can be found on pp.16-17. Examination venues will be the same as for general selection and selection for overseas student etc. noted in (1).
- * Examination content: The examination content for the various specialized subject groups can be found on pp.16-17.

6. Announcement of successful applicants

The examination code numbers of successful applicants will be listed on GSIS’s website around 5 p.m. on 4 September 2015 (<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 of special cases under Article 14 of the Standards for the Establishment of Graduate Schools.

Those applicants in employment who are seeking education as special cases under Article 14 of the Standards for the Establishment of Graduate Schools (whereby class hours are set for special times or periods outside ordinary teaching times and hours in consideration of circumstances such as the working hours of students with jobs, or the necessary commuting time) should meet with their proposed supervisors as soon as their applications have been cleared to discuss their research/study plans.

8. 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 9) systematically over a period of more than two years, which is the standard completion period, in response to circumstances such as the student’s having a job (Note 8). 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 admission procedures sent out after the announcement of successful applicants.

Note 8: 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 9: The term of study cannot extend past four 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.

9. Admission procedures

Information on admission procedures will be sent to each applicant at the end of February, 2016.

10. Costs

- | | |
|---|---------------------------------|
| (1) Entrance fee | 282,000 yen (subject to change) |
| (2) Tuition fee (Per Semester) | 267,900 yen (subject to change) |
| (Annual fee: 535,800 yen) (subject to change) | |

Note 10: 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 11: Information on exemptions from entrance and/or tuition fees or permission for delayed fee payment will be provided in the documentation on admission procedures sent out after the announcement of the examination results.

11. 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 special examination or study needs. Please contact GSIS Educational Affairs Section in this regard by 23 June 2015.
- (5) When requesting application documents by mail, please enclose a self-addressed envelope (No. 2 size, or approximately 34 cm x 24 cm) 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 information regarding the score of the year-2016 entrance examination of GSIS, Tohoku University, 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 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.

June 2015

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

- (i) In addition to the August admission, as for mature student selection and selection for overseas students, etc., we plan to accept applications for another term course. The deadline for such applications is in the beginning of January, and the written exam is scheduled to be held in the beginning of March
- (ii) In addition to the August admission, as for specialized subject groups, we plan to accept applications for another term course. The deadline for such applications is in the beginning of January, and the written exam is scheduled to be held in the beginning of March. Further information regarding those examinations will be announced in the beginning of November.

Examination schedule and examination content for each specialized subject group

April 2016

Two-Year Master's Program: General selection

Group 1 Mathematics	
Written examinations *	Specialized subjects 27 August 10:00-13:00 Select four out of 10 questions on differential and integral calculus (2), linear algebra (1), applied mathematics (1), discrete mathematics (1), probability/statistics (1), complex analysis (1), differential equation (1), geometry (1), and algebra (1).
	English 27 August 14:30-15:30 English
Oral examination	28 August 10:00- Applicants must speak for approximately 10 minutes on their (expected) graduation research at their previous university or the main areas of mathematics that they have studied. (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	
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 U.S. 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.
	Basic subjects 26 August 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.
	Specialized subjects 27 August 9:30-11:30 Physics and informatics: Select two out of seven questions on electrical engineering, communication engineering, electronic engineering, computers 1, computers 2, specialized physics 1, and specialized physics 2. Medicine and biology: Select two out of five questions on specialized molecular biology, specialized general physiology, specialized neuroendocrinology, specialized pathophysiology, and specialized health science.
	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
	Oral examination 27 or 28 August Applicants will be notified of the exact date and start time separately. (According to the content of your academic transcript, you may be exempted from the oral examination.) Applicants must speak for approximately 10 minutes on their (expected) graduation thesis and their research goals following admission, etc. (You do not need to fill in the "Presentation Title at the Oral Exam" column on the application form.) On the day of the examination, bring five copies of the materials related to the contents of your presentation (A4 size).

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Two-Year Master's Program: General selection

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 Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that the U.S. 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 26 August 9:30-11:00 (Meeting time 9:00) Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations
	Mathematics B 26 August 13:30-15:00 Fourier series and transform, Laplace transform, partial differential equations
	Specialized subjects 27 August 9:00-12:00 (Meeting time 8:30) Select two out of the following eight subjects: thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics and quantum mechanics.
Oral examination	28 August 13:30- (Meeting time 13:00) Applicants will be asked about their (expected) graduation research and their research goals following admission, etc. (You do not need to fill in the "Presentation Title at the Oral Exam" column on the application form.)

Group 4 Civil Engineering	
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 the U.S. ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)
	Short essay 26 August 9:30-11:00 A theme on civil engineering
	Specialized subjects 26 August 13:00- Applicants from civil engineering departments must choose seven questions out of 17 questions on 8 subjects (the test time is 3.5 hours). Other applicants must choose a total of four questions out of 17 questions on 8 subjects (the test time is 2 hours). 1. Mathematics (differential and integral calculus (1 question), linear algebra (1 question), probability and statistics (1 question)) 2. Mechanics of Elastic Media and Structures (2 questions) 3. Geotechnical and Concrete Engineering (2 questions) 4. Hydraulics (2 questions) 5. Water Quality and Environment (2 questions) 6. Biological and Ecological Engineering (2 questions) 7. Transportation Engineering and Planning (2 questions) 8. Operations Research (2 questions)
	Notes (1) 'Civil engineering departments' in this case means departments that are focused on civil engineering, regardless of their titles. The Educational Affairs Section should be consulted as to what is regarded as a civil engineering department. (2) No dictionary or calculator allowed. (3) For the past entrance examination questions and question scope, please refer to the following website: http://www.civil.tohoku.ac.jp/inshi.html
Oral examination	26 and 27 August: Applicants will be notified of the exact date and start time. Questions cover the education received in the previous institution, the content of the thesis (including the one in progress), their drive, motivation, and research goals following admission, etc.

April 2016

Two-Year Master's Program: General selection

Group 5 Languages and Media	
Written examinations *	Specialized subjects 27 August 10:00-13:00 Answer three 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 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 27 August 14:30-15:30 English
Oral examination	28 August 10:00- Applicants must speak for approximately 15 minutes on the education they received at their previous university and their graduation 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 6 Psychology and Philosophy	
Written examinations *	Specialized subjects 27 August 10:00-13:00 Select four of 12 questions from these areas: psychology (history of psychology, cognition, learning and memory, personality) and philosophy (history of philosophy)
	Foreign language 27 August 14:30-15:30 English
Oral examination	28 August 10:00- Applicants must speak for approximately 20 minutes on the education they received at their previous university and their graduation thesis (including theses under production). (OHP and 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 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 TOEFL Official Score Report, please ensure that the U.S. ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)
	Specialized subjects 27 August 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 in which you wish to be examined (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	28 August 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former university and their graduation 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, diagrams, 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

Two-Year Master's Program: Selection for overseas students, etc.

Group 1 Mathematics	
Written examinations *	<p>Specialized subjects 27 August 10:00-13:00</p> <p>Select four out of 10 questions on differential and integral calculus (2), linear algebra (1), applied mathematics (1), discrete mathematics (1), probability/statistics (1), complex analysis (1), differential equation (1), geometry (1), and algebra (1).</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 the TOEFL, and the Official Score Certificate in the case of TOEIC. When submitting TOEFL Official Score Report, please ensure that the U.S. 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>
Oral examination	<p>28 August 10:00-</p> <p>Applicants must speak for approximately 10 minutes on their (expected) graduation research at their former university or the main areas of mathematics that they have studied. (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).</p>

Group 2 Information and Biosystems	
Written examinations *	<p>Basic subjects 26 August 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 the Official Score Certificate in the case of TOEIC. When submitting the TOEFL Official Score Report, please ensure that the U.S. 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>Specialized subjects 27 August 9:30-11:30</p> <p>Physics and informatics: Select two out of seven questions on electrical engineering, communication engineering, electronic engineering, computers 1, computers 2, specialized physics 1 and specialized physics 2.</p> <p>Medicine and biology: Select two out of five questions on specialized molecular biology, specialized general physiology, specialized neuroendocrinology, specialized pathophysiology, and specialized 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 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	<p>27 or 28 August</p> <p>Applicants will be notified of the exact date and start time separately.</p> <p>Applicants must speak for approximately 10 minutes on the education they received at their former university, their (expected) graduation thesis and their research goals following admission, etc. (Overseas students who undertook their undergraduate studies at Tohoku University may in some cases be exempted from giving this presentation.)</p>

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Two-Year Master's Program: Selection for overseas students, etc.

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 the U.S. ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.) Those whose native language is English should contact GSIS on an individual basis.
	Mathematics A 26 August 9:30-11:00 (Meeting time 9:00) Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations
	Mathematics B 26 August 13:30-15:00 Fourier series and transform, Laplace transform, partial differential equations
	Specialized subjects 27 August 9:00-12:00 (Meeting time 8:30) Select two out of the following eight subjects: thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics, and quantum mechanics
Oral examination	28 August 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 10 minutes on the education they received at their former university or their graduation 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). Overseas students who undertook their undergraduate studies at Tohoku University do not need to give a presentation, but they will be asked about their (expected) graduation research and their research goals after admission, etc.

Group 4 Civil Engineering	
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 the U.S. ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)
	Specialized subjects 26 August 13:00-15:00 Applicants must choose four questions out of 17 questions on 8 subjects. 1. Mathematics (differential and integral calculus (1 question), linear algebra (1 question), probability and statistics (1 question)) 2. Mechanics of Elastic Media and Structures (2 questions) 3. Geotechnical and Concrete Engineering (2 questions) 4. Hydraulics (2 questions) 5. Water Quality and Environment (2 questions) 6. Biological and Ecological Engineering (2 questions) 7. Transportation Engineering and Planning (2 questions) 8. Operations Research (2 questions)
	Notes (1) No dictionary or calculator allowed. (2) For past entrance examination questions and question scope, please refer to the following website: http://www.civil.tohoku.ac.jp/inshi.html
Oral Examination	26 and 27 August: Applicants will be notified of the exact date and start time separately. Questions cover the education received in the previous institution, the content of the thesis (including the one in progress), their drive and motivation, and research goals following admission, etc. The Japanese language proficiency of the applicants is also judged.

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Group 5 Languages and Media	
Written examinations *	Specialized subjects 27 August 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 area 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 27 August 14:30-15:30 English or Japanese
Oral examination	28 August 10:00- Applicants must speak for approximately 15 minutes on the education they received at their former university and their graduation 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 6 Psychology and Philosophy	
Written examinations *	Specialized subjects 27 August 10:00-13:00 Select three out of 12 questions from these areas: psychology (history of psychology, cognition, learning and memory, personality) and philosophy (history of philosophy
	Foreign languages 27 August 14:30-15:30 English and Japanese
Oral examination	28 August 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former university and their graduation 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 the U.S. ETS sends it to GSIS by the final day of application. (For mailing, GSIS's DI code is 2149.)
	Specialized subjects 27 August 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, urban sociology, rural sociology and family sociology 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 Economics : select three out of five questions from the following areas: microeconomics, macroeconomics, urban economics, regional economics, statistics, econometrics and mathematics for economics Questions may be answered in English. Where necessary, the examiner will supply calculators. * State the name of the categories in which you wish to be examined (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	28 August 10:00- Applicants must speak for approximately 20 minutes on the education they received at their former university and their graduation 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.

※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.

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Two-Year Master's Program: Mature student selection

Group 1 Mathematics	
Short essay	28 August 10:00-11:30 Includes questions testing your understanding of basic mathematical concepts and terminology.
Oral examination	28 August 13:30- 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 (presentation outline, diagrams, etc.; A4 size).

Group 2 Information and Biosystems	
Oral examination	27 or 28 August Applicants will be notified as to the exact date and start time separately. Applicants must speak for approximately 10 minutes on their research (work) to date and their research goals following admission, etc. On the day of the examination, bring five copies of materials related to your presentation (presentation outline, diagrams, etc.; A4 size).

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 26 August 9:30-11:00 (Meeting time 9:00) Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations
	Mathematics B 26 August 13:30-15:00 Fourier series and transform, Laplace transform, partial differential equations
	Specialized subjects 27 August 9:00-12:00 (Meeting time 8:30) Thermodynamics, fluid mechanics, material dynamics, mechanical dynamics, control engineering, material physics, electromagnetics, quantum mechanics
Oral examination	28 August 13:30- 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 10 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

Group 4 Civil Engineering	
Short essay	26 August 9:30-11:00 A theme on civil engineering
Oral examination	26 and 27 August: Applicants will be notified of the exact date and start time separately. Applicants must speak for approximately 10 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.) The examiners will ask questions concerning your presentation, 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).

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Two-Year Master's Program: Mature student selection

Group 5 Languages and Media	
Short essay	27 August 10:00-11:30 The applicant must answer the essay question given on the examination day
Oral examination	28 August 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 their future 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 6 Psychology and Philosophy	
Short essay	27 August 10:00-11:30 Theme to be indicated on the examination day.
Oral examination	28 August 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	27 August 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	28 August 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. If you wish to use a PC projector, please contact the Educational Affairs Section beforehand.) 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	

	Information and Biosystems	Environmental Informatics	Environmental Informatics	A17	Prof. Jun-ichi KUDOH	System Information Sciences
		Intelligent Information Science	Algorithm Theory	B04	Prof. Xiau. ZHOU Assoc. Prof. Takehiro ITO	
			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	Applied Information Sciences
		Information and Applied Technology	Physical Fluctuations	D01	Prof. Kazuyuki TANAKA Assoc. Prof. Yuji WAIZUMI	
			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	Applied Information Sciences
		Information and Applied Technology	Human-Robot Informatics	D03-1	Prof. Satoshi TADOKORO	
				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 Information Sciences
		Applied Informatics for Human and Life Sciences	Cognitive Psychology	D06	(Currently vacant)	
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.