2022 Academic Year

Application for Autumn Enrollment in Doctoral Program

Second recruitment

(For advancement/entry in October 2022)

Program for Students Advancing from Master's Program of this Graduate School Regular Program for Incoming Students from Other Schools Special Selection Program for Working Adults Special Selection Program for Foreign Students

August 2022

Graduate School of Engineering, Tohoku University

O Admission Policy

The Tohoku University Graduate School of Engineering aims to develop researchers who think for themselves and carry out research with ethical standards and courage to realize a safe, secure, and prosperous society, and who can play a role in developing and innovating future science and technology with abundant creativity and research capability, based on profound knowledge and broad perspectives on nature and human beings. It also aims to develop professional engineers who can contribute to the sustainable development of society with not only highly specialized knowledge but also long-term perspectives and an international outlook. Specifically, we welcome students with the following academic abilities and skills, and who aspire to be creative, highly proficient researchers and professional engineers who contribute to the sustainable development of society:

- 1. A broad range of basic engineering knowledge, advanced expertise on their own research fields, and the ability to develop them in a flexible manner; and
- 2. The ability to logically present and discuss the significance and outcome of their research.

For this reason, the Graduate School of Engineering conduct Regular Selection, Special Selection for Working Adults, Special Selection for Foreign Students, and Selection for International Degree Courses Offering Education in English, to select students with an emphasis on the abilities and qualities necessary to carry out research in line with our educational philosophies and goals.

Applicants for Regular Selection, Special Selection for Foreign Students, and Selection for International Degree Courses Offering Education in English will be selected by each department through appropriate procedures by combining the methods: a written examination etc. to evaluate basic knowledge and specialized knowledge in engineering, language proficiency, and an oral interview to assess their aptitude. The selection will be made with an emphasis on the results of the written examination.

For Special Selection for Working Adults, the applicants will be selected by each department based on an oral interview to evaluate their research plan, research motivation, etc. If necessary, basic and specialized knowledge in engineering and an evaluation of their essay will also be considered in the selection process.

All new students are expected to have research experiences and basic knowledge to conduct independent research.

O Educational Objectives and Goals

Staying true to the Tohoku University's traditional spirit of "Research First", "Open Doors", and

"Practice-Oriented Research and Education", the Graduate School of Engineering is committed to achieving its educational objectives. One of these objectives is to develop researchers who act based on profound knowledge and broad perspective about nature and human beings, perform their research in an ethical, purposeful, and self-directed way to build safe, secure, and affluent society, and possess abundant creativity and high research skills that enable them to play a leading role in the future development and innovation of scientific technologies. Another educational objective of the School is to produce core technical experts who are equipped with not only a high-level of technical expertise but also a long-term vision and global viewpoint, and capable of making contributions to the sustainable development of our society.

The educational goal of the doctoral program is to nurture human resources performing not only subjective research in the relevant specialized field but also self-enlightenment to active worldwide as a leader in the future.

They are also expected to have a bird's eye view based on social and international demands, having the ability to develop research project with their own ideas to summarize international level papers and to discuss and present at international conferences etc.

\bigcirc Diploma Policy

The Graduate School of Engineering, Tohoku University, will award a doctoral degree in engineering to students who pass a review of doctoral thesis and the final examination. Students are also required to remain enrolled for a specific period of time, study a set of subjects that are offered in accordance with the School's educational objectives and goals, earn a specified number of credits, and demonstrate a high-level of ethical awareness and sense of responsibility, in addition to the following knowledge and skills:

- 1. Skills to embark on a new research subject and perform a research from a panoramic perspective that takes social needs into account;
- 2. Skills to solve issues with unique ideas;
- 3. Thinking skills that allow for interdisciplinary application;
- 4. Language proficiency as well as research paper writing, debating and communication skills that are sufficient to make presentations at international academic conferences, etc.;
- 5. Skills to provide research guidance; and
- 6. Basic skills to manage a research or project.

○ Curriculum Policy

The Tohoku University Graduate School of Engineering provides education according to the following policy to ensure that students can acquire knowledge and skills required under the diploma policy:

- 1. Enable students to acquire skills to explore research subjects and perform research from a panoramic perspective that takes social and international needs into account, skills to develop such research subjects by using unique ideas and compile the results into a world-class research paper, and thinking skills that allow for interdisciplinary applications;
- 2. Provide students with language proficiency as well as debating and communication skills that are sufficient to make presentations and participate in discussions at international academic conferences, etc.; and
- 3. Equip students with skills that allow them to provide research guidance in their fields of expertise.

In order to execute the above policies, the Graduate School of Engineering offers Common Subjects, and each department offers Interdisciplinary Basic Subjects, Major General Subjects, and Related Subjects. The overall educational curriculum of the master's and doctoral program is presented in the curriculum map. The Interdisciplinary Basic Subjects are mainly provided in lecture-based courses, and the Major General Subjects consists of special lectures, special seminars, doctor course seminars, etc. The subjects in lecturebased courses are provided for the purpose of acquiring a wide range of basic knowledge and advanced specialized knowledge in each major. A syllabus is prepared for each subject to clearly state the educational content, achievement methods, guidelines for self-study, etc. The Doctor Course Seminar is provided to foster the ability to conduct and develop advanced research, and acquire a wide perspective, language skill and debating skill.

In the lecture-based subjects, the faculty member in charge of the lecture will assess the student's basic knowledge, basic academic skill, specialized knowledge, etc. by using regular examinations, reports, etc. Details of the grade evaluation method are described in the syllabus for each subject. In the Doctor Course Seminar, the academic advisor will evaluate the following abilities based on research activity in the laboratory, presentation at domestic and international conferences, the doctor thesis and its defense.

- 1. Ability to design and conduct research or projects
- 2. Ability to investigate and analyze academic papers and technical materials
- 3. Basic academic skills necessary to write academic papers to meet international standards
- 4. Ability to evaluate research in related fields

- 5. Presentation and communication skills sufficient to present research results at international conferences
- 6. Ability to advise and guide research for undergraduate and master's course students

1. Departments and Admission Quotas

Department	Admission Quota	Department	Admission Quota
Quantum Science and Energy Engineering	A Few	Chemical Engineering	A Few
Electrical Engineering (* 1)	"	Biomolecular Engineering	"
Communications Engineering (* 1)	"	Metallurgy (* 2)	"
Electronic Engineering (* 1)	"	Materials Science (* 2)	"
Applied Physics (* 1)	"	Materials Processing (* 2)	"
Applied Chemistry	"	Management Science and Technology	"

- * 1 : Departments of Electrical Engineering, Communications Engineering, Electronic Engineering, and Applied Physics only recruit Special Selection Programs for Working Adults.
- * 2 : Departments of Metallurgy, Materials Science, and Materials Processing do not recruit Program for Students Advancing from Master's Program of this Graduate School.

2. Qualifications for Application

- Applicants who are currently in the first two years of a graduate studies program at this Graduate School and who expect to receive their master's degree by September 2022 may apply for **advancement to the three-year doctoral program**.
- Applicants other than the above for whom any of qualifications (1) to (8) below is true may apply for **admission as Regular Applicants from Other Schools.**
- Those eligible to apply for the **Special Selection Program for Working Adults** are, in principle, those who after graduating from university have worked for at least two years as engineers, instructors, researchers or the like at the time of entrance. The applicant must also satisfy at least one of the following qualifications (1) to (8) below is applicable.
- Those eligible to apply for the **Special Selection Program for Foreign Students** are those who have received a university education in Japan as foreign students or in an overseas university, and for whom any of qualifications (1) to (8) below is applicable.

The applicant must:

(1) Have earned a master's degree or professional degree, or expect to earn such a degree by September 2022.

- (2) Have earned a master's degree or equivalent professional degree, or expect to earn such a degree by September 2022, in the graduate school of a foreign university.
- (3) Have earned a master's degree or equivalent professional degree, or expect to earn such a degree by September 2022, by taking correspondence courses in Japan offered by schools outside Japan.
- (4) Have earned a master's degree or equivalent professional degree, or expect to earn such a degree by September 2022, by completing a course designated by the Minister of Education, Culture, Sports, Science and Technology in an educational institution in Japan recognized as adopting the educational system of a foreign country and having the curriculum of a graduate school in that country.
- (5) Have earned a master's degree or equivalent professional degree, or expect to earn such a degree by September 2022, by graduating a program of the United Nations University.
- (6) Have been recognized as having achieved at least the academic equivalent of a master's degree through an educational program offered at following institutions (a) to (c), and have passed the equivalency examination and screening process as stipulated in Clause 2, Article 16 of the Standards for the Establishment of a Graduate School (Act No. 28, 1974).
 - (a) Foreign schools
 - (b) Educational institutions which have the curriculum of a graduate program
 - (c) The United Nations University
- (7) Meet either of the following criteria for eligibility specified by the Minister of Education, Culture, Sports, Science and Technology:
 - (a) Have carried out research in a university or research institute, etc. for two or more years after graduating from university, and be recognized by this Graduate School as having achieved at least the equivalent academic abilities of someone with a master's degree on the basis of those research accomplishments.
 - (b) Have carried out research in a university or research institute, etc. for two or more years after completing 16 years of course studies overseas, or after completing, in Japan, 16 years of foreign school course studies by means of correspondence courses conducted by foreign schools, and be recognized by this Graduate School as having achieved at least the equivalent academic abilities of someone with a master's degree on the basis of those research accomplishments.
- (8) Be aged 24 or above and, through individual admission qualification screening, be recognized by this Graduate School as having achieved at least the equivalent academic abilities of someone with a master's degree.
 - **Note 1:** Applicants who are employed by Tohoku University should contact the Graduate Academic Affairs Section, Graduate School of Engineering in until August 23.
 - **Note 2:** Applicants should contact the head of the department in which they expect to major in advance regarding their research plans after enrollment.
 - **Note 3:** Applicants applying under qualification (7) should contact the head of the department in which they expect to major in advance regarding their qualifications to apply. The following documents will be needed at that time.

Required documents	Notes
Certification of research or work experience	Issued by the head of the place of work or research, certifying two or more years of engagement as engineer, instructor, researcher, etc. (any format; with official letterhead, signature, seal, etc.).
Summary of research or work	Research/work carried out during time spent working as an engineer, instructor, researcher, etc. (approximately 2 A4-size pages).
Academic transcript	Issued by the dean of the school from which you graduated.
Other reference materials	Copies of technical papers, patent announcements, etc.

Note 4: Applicants applying under qualification (8) will need to undergo admission qualification screening. Please contact the office of department for which you wish to apply (see the Remarks of Appendix) in advance.

3. Online Application Procedures and Application Period

The general flow for online applications is as follows.



- Please carefully check the information in these Application Guidelines, including the Qualifi cations for Admission (pages 1-2) and the necessary application documents (pages 5-12).
- For application documents, such as certificates of (expected) graduation, transcripts, and other s upport documentation, please request them in advance from the university you attended.

2. Paying the Examination Fee (Not necessary for Prpgram for Students advancing from Master's Programu of this Graduate School)

- Follow the directions on pages 8(11) of the Application Guidelines. Use an ATM (at a financial institution or convenience store) or online banking to pay via transfer to the designated bank account. A prescribed fee will be charged when making the payment (to be borne by the applicant).
- After making the transfer, attach documents that show the payee's account information, the amount, the date of transfer, and the name of the payer—such as a copy of the ATM statement or a copy of the screen of the completed Internet banking transfer—to the Confirmation for Examination Fee Payment, and upload the scanned data to the TAO Application Registration website.

[Note] Program for Students advancing from Master's Program of this Graduate School does not require examination fee.

3. Registering an Application via TAO Application Registration Website



- Access The Admissions Office website, and after creating an account, fill in the required applicant information. <u>https://admissions-office.net/en/portal/</u>
- Uploading certificates and other documents is also done at the time of application registration.
- <u>You cannot change your registered information after registration</u>. When registering, fill in the information carefully while checking to ensure that there are no errors.
- After completing the registration of your application via TAO, automatic email from TAO will be sent to inform that the registration is completed. Also, please check the status is "complete" on TAO to make sure that registration is completed.

Applicants should use The Admissions Office (hereinafter referred to as TAO), the designated online application system, to complete the following application procedures within the application period.

<u>The application period is from 9:00 on Friday, September 9, 2022 until 23:59 on Thursday,</u> <u>September 15, 2022 (Japan time).</u>

[Methods]

1. Access the following URL and click the Member Registration button. The account creation screen will appear, so fill in the necessary information and create an account.

URL: https://admissions-office.net/en/portal

- 2. After creating your account, enter your e-mail address and password to log in from the above URL. Use the Application Schemes menu to search for "Tohoku University / Graduate School of Engineering / Three-Year Doctoral Program / October Entry (Second recruitment)", then follow TAO system's directions and the directions below to apply.
- 3. Please submit the following documents as PDF files (except for the English score sheet) by uploading them to your application forms.
- In principle, the certificates to be submitted should be in Japanese or English. In the case of certificates in other languages, a Japanese or English translation, corroborated by the issuer of each certificate, should be attached.

If it is not possible to handle certificates in the way listed above, contact the Graduate Academic Affairs Section in the Academic Affairs Division of the Graduate School of Engineering and School of Engineering.

- *Once application documents have been submitted, we will not accept any replacements.
- *Withdrawal will not be accepted after an application has been received.
- *Those who have made false declarations in their application documents may have their entrance approval cancelled, even after enrollment.
- *Those who pass the tests and are admitted must submit original copies of their transcripts and graduation (or completion) certificates (not required for graduates of the School of Engineering) at the time of admission procedures. In addition, those who have applied under the qualification for admission (2) (e.g., those who have completed (or expect to complete) an advanced course at a college of technology or junior college, etc.) are also required to submit a "certificate of degree conferment." Your admission to the Graduate School may be cancelled if there are any discrepancies between the documents uploaded to the online application system and the original documents submitted at the time of admission procedures, or if you are unable to submit the original certificates.

[I] Applicants currently enrolled in the two-year master's program of this Graduate School applying for advancement to the three-year doctoral program

Required documents	Notes
Application for advancement	Fill out the application form for admission in the online application system.
CV	Download the prescribed CV file from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
Examination Admission Ticket(受 験票)	Download the prescribed examination admission ticket file from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
Address label	Fill in the necessary information on the address label in the online application system.
Written consent to take exam	 <u>XOnly for those intending to remain employed while in school.</u> Issued by head of workplace, showing employment duration, nature of work, and identity. (Any format; with official letterhead, signature, seal, etc.)

Note 1: The documents to be submitted when applying for admission to a department other than your current affiliated department are different from those indicated above. Please contact the Graduate Academic Affairs Section, Graduate School of Engineering in advance.

[II] Applicants other than [I] applying under qualifications (1) to (5)

Required documents	Notes
Application for admission	Fill out the application form for admission in the online application system.
CV	Download the prescribed CV file from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
	Prepared by the expected supervisor, using an official form for this Graduate School. The official form can be downloaded from the website:
Letter of Recommendation or Letter of Acceptance (推薦書・承諾書)	https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html *If a Letter of Recommendation cannot be submitted, submit instead a Letter of Acceptance by the faculty member.
	*Please be sure to submit a Letter of Recommendation those who apply for the Department of Metallurgy, Materials Science, or Materials Processing.
Graduate school transcript	Issued by the dean of your graduate school.

TOEFL®Test /TOEIC® Public Test score sheets Valid tests: TOEFL®Test PBT, TOEFL iBT®Test, TOEIC® Public Test	Should be submitted by applicants corresponding to the following categories (1) or (2); not necessary for those applying to the Applied Chemistry, Chemical Engineering, or Biomolecular Engineering departments. (1) Applicants for Regular Program from Other Schools or applicants for the Special Selection Program for Foreign Students applying to study in the Quantum Science and Energy Engineering, Metallurgy, Materials Science, Materials Processing, or Management Science and Technology departments. (2) Applicants for the Special Selection Program for Working Adults applying to study in the Metallurgy, Materials Science, or Materials Processing departments. *TOEFL iBT's My BestTM Score will not be used for preliminary screening at Graduate School of Engineering. *Applicants with a letter of permission (in any format) from the expected supervisor may submit a score sheet for the 299 TOEIC® public tests conducted before the 299 test outside of the stated submission period or may be exempted
	from submitting a score sheet. *TOEFL [®] , TOEFL [®] iBT, TOEFL [®] ITP, and TOEIC [®] are registered trademarks of Educational Testing Service (ETS).
Certificate of (expected) completion or of degree conferral	Issued by the dean of your graduate school or by the NIAD (National Institution for Academic Degrees and Quality Enhancement of Higher Education).
Undergraduate transcript	Issued by the dean of the university from which graduated
Copy of master's thesis	If thesis cannot be submitted, a summary of research shall be substituted (approximately 2 A4-size pages)
Examination Admission Ticket and Photo ID Form(受験票、写真 票)	Download the prescribed examination admission ticket and photo ID form files from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html The photo ID form should include an image file of a photograph showing the upper body of the applicant, facing forward with no hat, and have been taken within three months of application.
Residence Record	<u>XOnly for foreign applicants already residing in Japan whose</u> <u>period of stay is over 90 days.</u> (The residence record should be issued within 3 months and indicates residence status without Individual Number.)

Examination fee	(1)Download the prescribed Confirmation for Examination Fee
	Payment form file from the following URL.
	https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
Please pay 30,000 yen	(2)Payment should be proceeded by ATM or Internet Banking
By September 14, and	Transaction:
submit attached	* Sender's name should be the applicant's name in Katakana.
"Payment Confirmation	* Copy of ATM transaction statement or evidence of Internet
of Examination Fees"	Banking Transaction should be affixed to the "Payment
of Examination rees	Confirmation of Examination Fees".
	* Bank transfer fee should be paid by the applicant.
	* Only domestic banking transfer is accepted.
	Amount(金額): 30,000 yen
	Payment Deadline(納入期限): September 14, 2022
	Bank(銀行): Mitsubishi UFJ Bank (三菱UFJ 銀行)
	Bank Code: 0005
	Branch (支店): Wakatake-shiten (わかたけ支店)
	Branch Code: 809
	Account Type(預金種別): Futsuu(普通)
	Account Number(口座番号): 2259225
	Account Holder(口座名義): Kokuritsu Daigaku-houjin
	Tohokudaigaku(国立大学法人東北大学)
	Account Holder in Kana(カナ):ダイ)トウホクダイガク
	(3) MEXT scholarship recipients do not need to pay this fee.
	If you wish to apply for examination fee waiver due to the domestic
	disasters, please see the following website:
	https://www.eng.tohoku.ac.jp/admission/grad/disaster.html
	(4) This banking information is only valid within Japan. If you live
	overseas, please contact the Graduate Academic Affairs Section in
	advance.
	Fill in the necessary information on the address label in the online
Address label	
	application system.
	XOnly for those intending to remain employed while in school.
Written consent to take	Issued by head of workplace, showing employment duration, nature
exam	of work, and identity. (Any format; with official letterhead,
	signature, seal, etc.)

In addition to the above documents, submit the following documents required to the Program you wish to apply.

Special Selection Program for Working Adults

Required documents	Notes
	<u>*Not necessary for those intending to remain employed while in</u> <u>school.</u>
Proof of employment	Issued by head of workplace, showing employment duration, nature of work, and identity.
	(Any format; with official letterhead, signature, seal, etc.)

• Special Selection Program for Foreign Students

Required documents	Notes
Recommendation Letter	Prepared by a supervising faculty member or equivalent from your graduate school or university (any format).
Proof of Japanese language proficiency	Prepared by a Japanese instructor or (prospective) professor, etc. (any format).

Other reference materials such as Papers and Reports to demonstrate academic ability may be uploaded as PDF files.

[III] Applicants applying under qualification (7)

Required documents	Notes
Application for admission	Fill out the application form for admission in the online application system.
CV	Download the prescribed CV file from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
Research plan	Approximately 1 A4-size page
Letter of Recommendation or Letter of Acceptance (推薦書・承諾書)	Prepared by the expected supervisor, using an official form for this Graduate School. The official form can be downloaded from the website:
	https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html
	*If a Letter of Recommendation cannot be submitted, submit instead a Letter of Acceptance by the faculty member.
	*Please be sure to submit a Letter of Recommendation those who apply for the Department of Metallurgy, Materials Science, or Materials Processing.
Undergraduate transcript	Issued by the dean of the university from which you graduated

TOEFL®Test /TOEIC® Public Test score sheets	Should be submitted by applicants corresponding to the following categories (1) or (2); not necessary for those applying to the Applied Chemistry, Chemical Engineering, or Biomolecular Engineering departments.
Valid tests: TOEFL®Test PBT, TOEFL iBT®Test,	(1) Applicants for Regular Program from Other Schools or applicants to the Special Selection Program for Foreign Students applying to study in the Quantum Science and Energy Engineering, Metallurgy, Materials Science, Materials Processing or Management Science and Technology departments.
TOEIC [®] Public Test	(2) Applicants to the Special Selection Program for Working Adults applying to study in the Metallurgy, Materials Science, or Materials Processing departments.
	<u>*TOEFL iBT's My BestTM Score will not be used for preliminary</u> screening at Graduate School of Engineering.
	*Applicants with a letter of permission (in any format) from the expected supervisor may submit a score sheet for the 299 TOEIC® public test or other TOEIC ®public tests conducted before the 299 test outside of the stated submission period or may be exempted from submitting a score sheet.
	*TOEFL®, TOEFL® iBT, TOEFL® ITP, and TOEIC® are registered trademarks of Educational Testing Service (ETS).
Certificate of completion or of degree conferral	Issued by the dean of the university from which graduated or by the NIAD (National Institution for Academic Degrees and Quality Enhancement of Higher Education).
Certification of research or work experience	Issued by the head of the place of work or research, certifying two years or longer of engagement as engineer, instructor, researcher, etc. (Any format; with official letterhead, signature, seal, etc.)
Examination Admission Ticket and Photo ID Form(受験票、写真 票)	Download the prescribed examination admission ticket and photo ID form files from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html The photo ID form should include an image file of a photograph showing the upper body of the applicant, facing forward with no hat, and have been taken within three months of application.
Residence Record	<u>XOnly for foreign applicants already residing in Japan whose period</u> of stay is over 90 days. (The residence record should be issued within 3 months and indicates residence status without Individual Number.)

Examination fee	(1)Download the prescribed Confirmation for Examination Fee Payment form file from the following UBL
Please pay 30,000 yen By September 14 , and submit attached "Payment Confirmation of Examination Fees"	Payment form file from the following URL. https://www.eng.tohoku.ac.jp/english/admission/procedure/doctoral.html (2)Payment should be proceeded by ATM or Internet Banking Transaction: * Sender's name should be the applicant's name in Katakana. * Copy of ATM transaction statement or evidence of Internet Banking Transaction should be affixed to the "Payment Confirmation of Examination Fees". * Bank transfer fee should be paid by the applicant. * Only domestic banking transfer is accepted. Amount(金額): 30,000 yen Payment Deadline(納入期限): September 14, 2022 Bank(銀行): Mitsubishi UFJ Bank (三菱UFJ 銀行) Bank Code: 0005 Branch(支店): Wakatake-shiten(わかたけ支店) Branch Code: 809 Account Type(預金種別): Futsuu(普通) Account Type(預金種別): Futsuu(普通) Account Holder(口座名義): Kokuritsu Daigaku-houjin Tohokudaigaku(国立大学法人東北大学) Account Holder in Kana(カナ): f* ()トウカウf* (ħ* ĵ (3) MEXT scholarship recipients do not need to pay this fee. If you wish to apply for examination fee waiver due to the domestic disasters, please see the following website: https://www.eng.tohoku.ac.jp/admission/grad/disaster.html (4) This banking information is only valid within Japan. If you live overseas, please contact the Graduate Academic Affairs Section in
	advance.
Address label	Fill in the necessary information on the address label in the online application system.
Written consent to take exam	XOnly for those intending to remain employed while in school. Issued by head of workplace, showing employment duration, nature of work, and identity. (Any format; with official letterhead, signature, seal, etc.)

In addition to the above documents, submit the following documents required to the Program you wish to apply.

Special Selection Program for Working Adults

Required documents	Notes
Proof of employment	<u>XNot necessary for those intending to remain employed while in school.</u> Issued by head of workplace, showing employment duration, nature of work, and identity. (Any format; with official letterhead, signature, seal, etc.)

• Special Selection Program for Foreign Students

Required documents	Notes
Recommendation Letter	Prepared by a supervising faculty member or the equivalent from your university (any format).
Proof of Japanese language proficiency	Prepared by a Japanese instructor or (prospective) professor, etc. (any format).

Other reference materials such as Papers and Reports to demonstrate academic ability may be uploaded as PDF files.

[IV] Applicants applying under qualification (6),(8)

Please contact the Graduate Academic Affairs Section, Graduate School of Engineering.

4. Examination and Selection

Examination dates: To take place from Tuesday, September 27 to Thursday, September 29, 2022 according to the appendix.

Location: Graduate School of Engineering, Tohoku University (details will be informed to each applicant from the department to which the application was made)

• Applicants will be selected based on overall consideration of a written essay, oral interview test results, and submitted documents.

5. Announcement of Results

Results are scheduled to be posted around 5:00 p.m. on Friday, September 30, 2022, on the website (https://www.eng.tohoku.ac.jp/)

Notification of results will also be mailed to applicants who pass the entrance examination. Please note that results cannot be given in response to telephone inquiries.

6. Enrollment Procedures, Etc.

- (1) Details of the enrollment procedures will be announced when the Notification of results is mailed.
- (2) Fees necessary at the time of enrollment

Students entering from another school

- (a) Admission fee: 282,000 yen (tentative)
- (b) Tuition: 267,900 yen for one semester (annual 535,800 yen) (tentative)

Advancing students

- (a) Admission fee: None (students are expected to have completed the first two years of this Graduate School's doctoral program and as such will have already paid the admission fee)
- (b) Tuition: 267,900 yen for one semester (annual 535,800 yen) (tentative)

- **Note 1:** The above amounts are tentative. In the case that admission or tuition fees are revised, the new fees will become applicable from the time of the revision.
- **Note 2:** Payment of Admission and Tuition Fees will be announced when the Notification of Result is sent.

For information on procedures for exemption and deferment of the Admission and Tuition Fees, please visit the following URL: <u>https://www2.he.tohoku.ac.jp/menjo/</u>

7. Eligibility for the Long Term Study Program

Some applicants, due to the need to continue with employment or other special circumstances (**Note 1**), may request permission to follow a planned course of study longer than the normal period of three years in order to receive their degree (**Note 2**). This Graduate School offers such an option, called a "Long Term Study Program," to those who qualify in an advance screening exam. Long term doctoral students pay the same amount over the length of their studies as those enrolled in the standard three-year program. Inquiries about this program can be accepted at any time before enrollment. Please contact the Graduate Academic Affairs Section, Graduate School of Engineering.

Applicants hoping to be considered for this program need to apply at the enrollment procedures. It is also possible to apply for this program in the middle of the enrollment, but not if less than one year remained in the standard period of study. In such a case, the length of the Long Term Study period is limited to twice the remaining period of study within the standard period of study.

- **Note 1:** To be eligible for this program, the applicant who (1) is employed by a company or be selfemployed, (2) needs maternity leave, or is engaged in child or family care, or (3) is otherwise determined by this Graduate School to be suitable for the program (excluding financial reasons).
- **Note 2:** The period of study may not be extended beyond six years, but it is possible to request that the allowed period be shortened. In principle, no special curriculum will be prepared for students in the long term study program.

8. Handling of Personal Information

- (1) The Graduate School of Engineering of Tohoku University handles personal information in strict compliance with regulations such as the "Act on the Protection of Personal Information" and the "National University Corporation Tohoku University -Policy on the Protection of Personal Information", taking every precaution to protect personal information.
- (2) Examination results and other personal information obtained in the application process will be used for selection of students for admission, enrollment procedures, follow-up surveys, student support after enrollment (e.g., scholarships, tuition waiver, and health care), student guidance, and other academic purposes, as well as in collection of tuition fees, etc.
- (3) After enrollment, the Graduate School may outsource administrative work in educational affairs to third-party companies and provide them, as necessary, with some or all of the student's personal information, in compliance with the "National University Corporation Tohoku University Policy on the Protection of Personal Information".

9. Important Notes

- (1) Submitted application documents and examination fees cannot be returned.
- (2) If you do not receive your examination admission ticket by Thursday, September 22, please contact the office of department for which you wish to apply (see the Remarks of Appendix) in advance.
- (3) All other inquiries regarding application for admission should likewise be made to the Graduate Academic Affairs Section, Graduate School of Engineering.
- (4) Applicants desiring consultation regarding the need for assistance or other consideration in taking the examination or conducting your studies should make written application indicating the items listed below (no special format). Be assured that such a request will in no way prejudice the outcome of the selection process, as all applicants will be treated fairly.

*Deadline for consultation: As a rule, no later than Friday, August 19, 2022. *Information to be indicated in making application:

- (a) Name, address, and phone number of applicant
- (b) University, etc. from which the applicant has graduated
- (c) Any special considerations desired when taking examination
- (d) Any special considerations desired in the study environment
- (e) Nature of considerations provided up to now
- (f) Other relevant information about daily life circumstances
- (g) Reference materials (if currently under medical treatment, enclose a medical certificate issued by your physician
- (5) Tohoku University has established Tohoku University Security Export Control Regulations based on the Foreign Exchange and Foreign Trade Act, and screens each submitted application when we accept international students in our university. In the event that their research plans apply to the regulatory concerns, above mentioned students may not be able to receive desired education and their research themes may be limited.

August 2022

Graduate Academic Affairs Section Graduate School of Engineering Tohoku University 6-6-04 Aramaki Aza Aoba, Aoba-ku, Sendai, Miyagi 980-8579, Japan Phone: +81-22-795-5820 Email: eng-in@grp.tohoku.ac.jp Appendix—Admission Screening Examination Schedule for October 2022 Enrollment in Doctoral Program (Second recruitment)

Program for Students Advancing from Master's Program of this Graduate School Regular Program for Incoming Students from Other Schools Special Selection Programs for Working Adults and for Foreign Students

(A) Program fo	r Students Advanc	ring from Master	's Program of thi	s Graduate School
(A) I logi alli lo	n bludents Auvan	ung nom master	S I TUgram UI UII	S Graduate School

Department	Test Subjects	Date and Time	Description	Remarks	
Quantum Science and Energy Engineering	Selection to be made	e separately by the d	epartment.	Department inquiries: Mechanical and Aerospace Engineering Academic Affairs Section Phone: 022-795-7030	
Applied Chemistry, Chemical Engineering, Biomolecular Engineering	Selection to be made	e separately by the d	epartment.	Department inquiries: Office: 022-795-7205 Website: http://www.che.tohoku.ac.jp/index-j.html	
Management Science and Technology	Selection to be made separately by department.				

Test Subjects Date and Time Department Description Remarks If neither TOEFL nor TOEIC score sheet is available due to COVID-19, submit as many materials to evaluate your English At the time of application, submit proficiency as possible (Eiken, TOEFL ITP, an original TOEFL ®or TOEIC® TOEFL iBT Special Home Edition Test, score sheet no older than two etc.). English If none of these are available, attach your vears before the examination. Contact the department if your undergraduate transcript (those who graduated from the School of Engineering native tongue is English of the Tohoku University do not need to submit the transcript of the university). (1) The written test may be waived Tue., Sep. 27, **Differential and Integral** depending on the applicant's record as Math A Calculus, Linear Algebra, Vector 10:00 to 11:30 a.m. indicated on transcripts. (mandatory) (Meeting time 9:30) Analysis Quantum Science and Energy (2) The scopes of the subjects can be Engineering, inquired of the department or confirmed at the website below. Ordinary Differential Equations, Tue., Sep. 27, http://www.qse.tohoku.ac.jp/admission/adm Math B Partial Differential Equations. 1:00 to 2:30 p.m. ission_graduate.html (mandatory) Fourier Series and Fourier Transforms, Laplace Transforms (3) Calculators or devices such as watches or mobile phones with calculation or Field I : Fluid Dynamics, communication functions are not allowed Strength of Materials, Mechanical in the examination room. materials, Electromagnetics, Quantum Mechanics, (4) Interviews are given only to those who Specialized Wed., Sep. 28, Chemistry basics pass the written test. When and how the subjects 10:00 to 11:00 a.m. Field II: Radiochemistry, Radiation results of the written test results will be (elective)* (Meeting time 9:30) engineering, Reactor physics notified is announced on the first day of the *Choose any two of the nine examination. subjects(no more than one (1) subject can be selected from Field (5) We will contact each applicant if there II)

(B) Regular Program for Incoming Students from Other School

Department	Test Subjects	Date and Time	Description	Remarks
	Interview	Thu., Sep. 29 (time indicated by the department)	Presentation about your study so far, such as the contents of your master's thesis, and research plans after entering this program. (About 20 minutes). After that, a question- and- answer session will be held. (About 20 minutes).	 is any change in the examination to prevent the spread of COVID-19. (6) We will contact each applicant to confirm specialized subjects the applicant will choose. The applicants cannot change specialized subjects once they choose. (7) We will contact each applicant to confirm the examination will be either English or Japanese. The applicants cannot change the language for the examination once they declare. Department inquiries:Mechanical and Aerospace Engineering Academic Affairs Section Phone: 022-795-7030
	Specialized subjects	Tue., Sep. 27, ~Wed., Sep. 28 150 min	Choice of 3 questions from total of 8 (2 each in inorganic and physical chemistry, organic chemistry, biochemistry, and chemical engineering)	(1) To prevent the spread of new coronavirus infection, we will notify each applicant if there is any change in the implementation method.
Applied Chemistry, Chemical Engineering, Biomolecular Engineering	English	Tue., Sep. 27, ~Wed., Sep. 28 60 min.		(2) For epidemic prevention reasons The test schedule may change.
	Interview test	Tue., Sep. 27, ~Wed., Sep. 28 30 min.	Summary presentation about master's thesis and oral test	Department inquiries: Office: 022-795-7205 Website: http://www.che.tohoku.ac.jp /index-j.html
Metallurgy, Materials Science, Materials Processing	English		At the time of application, submit TOEFL ®or TOEIC® score sheet no older than two years before the entrance exam.	(1) Please refer to the following website to ensure further details, especially the types of TOEFL® Test/TOEIC® scores to meet the admission requirement. <u>http://www.material.tohoku.ac.jp/admission/</u> <u>ndex.html</u>

Department	Test Subjects	Date and Time	Description	Remarks
Department	General field- specific subjects	Tue., Sep. 27 to Thu., Sep. 29 (40 minutes)	Oral test in physics, chemistry, materials chemistry, materials properties of matter, and materials processing.	 (2) The English test may be waived for those who have completed master's programs at this school. (3) Schedules etc. will be notified individually.
	Designated field-specific subjects	Tue., Sep. 27 to Thu., Sep. 29 (40 minutes)	Oral presentation about master's thesis or research conducted after completing master's degree.	 (4) Be sure to confirm your selection category with the expected supervisor. *Contact the department for more information or check on the following homepage <u>http://www.material.tohoku.ac.jp/admission//</u><u>ndex.html</u> * To prevent the spread of new coronavirus infection,we will notify each applicant if there is any change in the implementation method. *Inquire with the department for details. Academic Affairs Section: 022-795-7373
Management Science and Technology	English		At the time of application, submit an original TOEFL *or TOEIC *score sheet no older than two years before the entrance exam. TOEFL iBT Home Edition scores are also accepted.	Time and place for the oral test will be notified by the department. Department inquiries:
Technology	Oral test	Tue., Sep. 27 to Thu., Sep. 29 (time indicated by the department)	Presentation on research up to now and plans for research after entering program, followed by questions on presentation contents, etc.	Office: 022-795-3863 Website: http://www.most.tohoku.ac.jp/en/

(C) Special Selection Program for Working Adults

Department	Test Subjects	Date and Time	Description	Remarks
Quantum Science and Energy Engineering,	Interview	Wed., Sep. 28 or Thu., Sep. 29 (time indicated by the department)	<presentation and="" questions=""> (Approx. 30 minutes in total) Presentation about your study so far, such as the contents of your master's thesis and research plans after entering this program. (about 20 minutes). After that a question- and-answer session will be held (about 10 minutes). <oral test=""> (Approx. 20 minutes) Questions from mathematics and specialized subjects. * The scope of the mathematics is the same as those of Math A and Math B of the written tests for Regular Program for Incoming Students from Other Schools. *Questions about two specialized subjects, selected among Dynamics of Mechanical Systems,Strength of Materials, Chemical engineering, Nuclear engineering, depending on the speciality of the examinee will be given.</oral></presentation>	 (1) Applicants whose research achievement or research history is recognized as qualified will be exempted from the oral test. In this case, the question-and-answer session will be extended by 10 minutes so that the interview will be performed in approximately 40 minutes. The applicant should ask the prospective professor about the details of the exemption. (2) The scopes of the subjects can be inquired to the department or confirmed at the website below. http://www.qse.tohoku.ac.jp/admission/admis sion_graduate.html (3) We will contact each applicant if there is any change in the examination to prevent the spread of COVID-19. (4) We will contact each applicant to confirm the examination will be either English or Japanese. The applicants cannot change the language for the examination once they declare. Department inquiries: Mechanical and Aerospace Engineering Academic Affairs Section Phone: 022-795-7030
Electrical Engineering, Communications Engineering, Electronic Engineering	Interview	Tue., Sep. 27 to Thu., Sep. 29 (time and date indicated by the department)	Approx. 20-minute presentation about studies up to now and research plans after entering this program. Bring five copies of support materials with you.	 **To prevent the spread of new coronavirus infection, we will notify each applicant if there is any change in the implementation method. Department inquiries: Electronic Information System and Applied Physics Academic Affairs Section Phone: 022-795-7186

Department	Test Subjects	Date and Time	Description	Remarks
Applied Physics	Interview	Tue., Sep. 27 to Thu., Sep. 29 (time and date indicated by the department)	Presentation on research for 10 min. and oral test. English ability may also be asked about.	The field-specific interview will be held prior to the entrance exam .
Applied Chemistry, Chemical Engineering, Biomolecular Engineering	Interview test	Tue., Sep. 27~ Thu., Sep. 29 30 min	Research presentation and oral test	 To prevent the spread of new coronavirus infection, we will notify each applicant if there is any change in the implementation method. For epidemic prevention reasons The test schedule may change. Department inquiries: Office: 022-795-7205 Website: http://www.che.tohoku.ac.jp/index-j.html

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Department	Test Subjects	Date and Time	Description	Remarks
Metallurgy, Materials Science, Materials Processing	English		At the time of application, submit TOEFL® or TOEIC® score sheet no older than two years before the entrance exam.	 Please refer to the following website to ensure further details, especially the types of TOEFL® Test/TOEIC® scores to meet the admission requirement. http://www.material.tohoku.ac.jp/admission/i ndex.html Submission of TOEFL*/TOEIC* score sheet may be waived for qualified applicants. Ask your prospective professor for details. Schedules etc. will be notified individually. Be sure to confirm your selection category with the expected supervisor. *Contact the department for more
	General field- specific subjects	Tue., Sep. 27 to Thu., Sep. 29 (40 minutes)	Oral test in physics, chemistry, materials chemistry, materials properties of matter, and materials processing.	information or check on the following homepage <u>http://www.material.tohoku.ac.jp/admission/in</u> <u>dex.html</u> * To prevent the spread of new coronavirus infection,we will notify each applicant if
	Designated field-specific subjects	Tue., Sep. 27 to Thu., Sep. 29 (40 minutes)	Oral presentation about research conducted up to now or master's thesis.	there is any change in the implementation method. *Inquire with the department for details. Academic Affairs Section: 022-795-7373

Department	Test Subjects	Date and Time	Description	Remarks
Management Science and Technology	Oral test	Tue., Sep. 27 to Thu., Sep. 29 (time indicated by thedepartment)	Presentation on research work up to now and plans for research after entering program, followed by questions on presentation contents, etc.	Time and place of the oral test will be notified by the department. Department inquiries: Office: 022-795-3863 Website: http://www.most.tohoku.ac.jp/en/

(D) Special Selection Program for Foreign Students

Department	Test Subjects	Date and Time	Description	Remarks
	English		At the time of application, submit an original TOEFL® or TOEIC® score sheet no older than two years before the examination. Contact the department if your native tongue is English.	If neither TOEFL nor TOEIC score sheet is available due to COVID-19, submit as many materials to evaluate your English proficiency as possible (Eiken, TOEFL ITP, TOEFL iBT Special Home Edition Test, etc.). If none of these are available, attach your undergraduate transcript (those who graduated from the School of Engineering of the Tohoku University do not need to submit the transcript of the university).
Quantum Science and Energy	Math A (mandatory)	Tue., Sep. 27, 10:00 to 11:30 a.m. (Meeting time: 9:30)	Differential and Integral Calculus, Linear Algebra, Vector Analysis	 (1) The written test may be waived depending on the applicant's record as indicated on transcripts.
Engineering,	Math B (mandatory)	Tue., Sep. 27, 1:00 to 2:30 p.m.	Ordinary Differential Equations ,Fourier Series and Fourier Transforms, Laplace Transforms, Partial Differential Equations	 (2) The scopes of the subjects can be inquired to the department or confirmed at the website below http://www.qse.tohoku.ac.jp/admission/adm ission_graduate.html (3) Calculators or devices such as watches
	Specialized subjects (elective)*	Wed., Sep. 28, 10:00 to 11:00 a.m. (Meeting time:9:30)	Field I :Fluid Dynamics, Strength of Materials, Mechanical materials, Electromagnetics, Quantum Mechanics, Chemistry basics Field II : Radiochemistry, Radiation engineering, Reactor physics *Choose two of the nine subjects; no more than one (1) subject can be selected from Field II.	 (c) culture of do field such as watches or mobile phones with calculation or communication functions are not allowed in the examination room. (4) Interviews are given only to those who pass the written test. (4) When and how the results of the written test will be notified is announced on the first day of the examination

Department	Test Subjects	Date and Time	Description	Remarks
	Interview	Thu., Sep. 29 (time indicated by the department)	Presentation about your study so far, such as the contents of your master's thesis, and research plan after entering this program (about 20 minutes). After that, a question-and-answer session will be held (about 20 minutes).	 (5) We will contact each applicant if there is any change in the examination to prevent the spread of COVID-19. (6) We will contact each applicant to confirm specialized subjects the applicant will choose. The applicants cannot change specialized subjects once they choose. (7) We will contact each applicant to confirm the examination will be either English or Japanese. The applicants cannot change the language for the examination once they declare.
	Basic subjects	Tue., Sep. 27∼ Wed., Sep. 28	Choice of 1 question from Basic I (inorganic chemistry, analytical chemistry, physical chemistry), Basic II (organic chemistry), and math	Department inquiries: Mechanical and Aerospace Engineering Academic Affairs Section Phone: 022-795-7030 (1) To prevent the spread of new coronavirus infection, we will notify each applicant if there is any change in the implementation method.
Applied Chemistry, Chemical Engineering, Biomolecular EngineeringSpecialized subjectsInterview test	90 min	Applicant's field of specialty	(2) For epidemic prevention reasons The test schedule may change.	
	Interview test	Tue., Sep. 27~ Wed., Sep. 28 30 min	Summary presentation about master's thesis and oral test	Department inquiries: Office: 022-795-7205 Website: http://www.che.tohoku.ac.jp /index-j.html

Department	Test Subjects	Date and Time	Description	Remarks
Department	English		At the time of application, submit TOEFL [®] or TOEIC [®] score sheet no older than two years before the entrance exam.	 (1)Please refer to the following website to ensure further details, especially the types of TOEFL®Test/TOEIC® scores to meet the admission requirement. <u>http://www.material.tohoku.ac.jp/admission/</u><u>ndex.html</u> (2)Submission of TOEFL®/TOEIC® score sheet may be waived for qualified
	General field- specific subjects	Tue., Sep. 27 to Thu., Sep. 29 (40 minutes)	Oral test in physics, chemistry, materials chemistry, materials properties of matter, and materials processing.	applicants. Ask your prospective professor for details. (3)Schedules etc. will be notified individually.
Metallurgy, Materials Science, Materials Processing	Designated field-specific subjects	Tue., Sep. 27 to Thu., Sep. 1 (40 minutes)	Oral presentation about research to date or master's thesis (in English or Japanese).	 (4) Be sure to confirm your selection category with the expected supervisor. *Contact your department for more information or check on the following homepage <u>http://www.material.tohoku.ac.jp/admission/</u><u>ndex.html</u> * To prevent the spread of new coronavirus infection,we will notify each applicant if there is any change in the implementation method. *Inquire with the department for details. Academic Affairs Section: +81-22-795-7373
Management Science and Technology	English		At the time of application, submit an original TOEFL® or TOEIC® score sheet no older than two years before the entrance exam. TOEFL iBT Home Edition scores are also accepted.	Time and place for the oral test will be notified by the department. Department inquiries: Office: 022-795-3863 Website:

Department	Test Subjects	Date and Time	Description	Remarks
	Oral test	Tue., Sep. 27 to Thu., Sep. 29 (time indicated by the department)	Presentation on research up to now and plans for research after entering program, followed by questions on presentation contents, etc.	http://www.most.tohoku.ac.jp/en/