

2019 Academic Year

Application for Spring Enrollment in Master's Program

(for entry in April 2019)

Special Selection Program for Early Graduate Students

October 2018

Graduate School of Engineering, Tohoku University

## ○ Admission Policy

The Graduate School of Engineering welcomes prospective students who share our educational objectives and goals. They should have the following academic skills and abilities that are necessary to acquire knowledge and skills outlined in the curriculum policy:

1. Basic academic skills needed to learn engineering;
2. Logical thinking ability to solve problems; and
3. Linguistic proficiency to adapt to and leverage a global educational and research environment.

## ○ 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.

Specifically, the educational goal of the Master's Degree Program is to endow students with a broad range of basic academic and language skills that are needed for the performance of research, as well as abilities to develop their research subjects by using unique ideas and present research theses at a public occasion. They are also expected to have basic skills and advanced techniques to perform a research or provide a research and technical guidance in their field of expertise.

## ○ Diploma Policy

The Graduate School of Engineering, Tohoku University will award a master's degree in engineering to students who pass a review of master's thesis or research results on a particular subject as well as 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. A broad range of basic knowledge and academic skills that help students understand and explore the essence of their research subjects;
2. Profound knowledge about their fields of expertise;
3. Interdisciplinary knowledge relating to their fields of expertise;
4. System design skills obtained through the integration of knowledge outside their fields of expertise;
5. Skills to determine a research subject and solve issues;
6. Advanced skills to perform, apply, and develop their research;
7. Linguistic proficiency necessary to perform their research; and
8. Basic skills to provide research or technical guidance.

## ○ Curriculum Policy

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

1. Help students acquire a broad range of knowledge, advanced technical expertise, and interdisciplinary knowledge relating to their field of expertise that are necessary to understand the essence of their research subjects and perform their research;
2. Enable students to acquire advanced skills to work on their research subjects and develop the subjects by using unique ideas; and
3. Provide students with linguistic skills that are necessary to perform their research and make a presentation of the research results.

# 1. Departments and Admission Quotas

## ○ Special Selection Program for Early Graduate Students

Department	Quota	Department	Quota
Mechanical Systems Engineering	Low	Applied Chemistry	Low
Finemechanics	"	Chemical Engineering	"
Robotics	"	Biomolecular Engineering	"
Aerospace Engineering	"	Metallurgy	"
Quantum Science and Energy Engineering	"	Materials Science	"
Electrical Engineering	"	Materials Processing	"
Communications Engineering	"	Civil and Environmental Engineering	"
Electronic Engineering	"	Architecture and Building Science	"
Applied Physics	"	Management Science and Technology	"

## 2. Qualifications for Application

Applicants for the Special Selection Program for Early Graduate Students are those who have been permitted to graduate fulfilling the enrollment period of more than three years and less than four years, and also expect to graduate in March 2019.

## 3. Period for Submission of Application

Applications should be submitted from Tuesday, January 22 to Friday, January 25, 2019, during the office hours from 9:00 a.m. to 4:30 p.m. (not including 11:45 a.m. to 1:00 p.m.).

All application documents must be reached to the office by the last day of the above period. **(Applications will not be accepted on Saturdays, Sundays, or national holidays.)**

## Submit in person or mail to:

Graduate Academic Affairs Section  
Graduate School of Engineering  
Tohoku University  
6-6-04 Aramaki Aza Aoba, Aoba-ku, Sendai, Miyagi 980-8579, Japan

## 4. Application Documents

Applicants should prepare the following documents and submit them during the above time frame.

The certification documents must be either in Japanese or English. If the documents cannot be issued in either language, please attach a Japanese or English translation, which is officially issued by the same institution that issued the certification documents.

Please contact the Graduate Academic Affairs Section beforehand in case the above requirement cannot be fulfilled.

- \*Replacement or renewal of submitted application documents are not accepted.
- \*Withdrawal of application is not accepted after its submission.
- \*Tohoku University does not accept copies digital files, or printouts of digital files as original documents.
- \* When you fill in application documents, please use a black pen (using pencils or erasable pens by friction are not allowed).
- \*If you declare a false information to the application forms, your admission will be revoked even after enrollment.

Required documents	Notes
Application for admission	Use an official application form for this Graduate School.
Undergraduate transcript	Issued by the dean of the university from which you graduated. (Not required if currently a resident in the School of Engineering of this university.)
Original of TOEFL®Test /TOEIC® Public Test score sheets	Not necessary for those applying to the Applied Chemistry, Chemical Engineering, or Biomolecular Engineering.
Valid tests: TOEFL®Test PBT , TOEFL iBT®Test ,, TOEIC® Public Test (Listening & Reading Test)	Not necessary for those who are currently in the IMAC-U program and applying to the Mechanical Systems Engineering, Finemechanics, Robotics, or Aerospace Engineering.  <b><u>Submitted originals of TOEFL/TOEIC score sheets will not be returned. However TOEFL®Test “Examinee Score Reports” may be returned on the day of the entrance examination, if requested at the time of application.</u></b>  <b><u>The TOEFL institution code of the Graduate School of Engineering, Tohoku University is 8958.</u></b>

	*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 the university from which the applicant has graduated or by the NIAD (National Institution for Academic Degrees and University Evaluation).
*2 Photo ID and examination admission ticket	Photo (4cm high × 3cm wide) must show upper body, facing front with no hat, and have been taken within three months of application. Attach it to the photo ID sheet.
Examination fee	30,000 yen (If the application is mailed, submit a postal money order leaving the recipient blank).
*3 Examination fee receipt	Use an official form for this Graduate School (fill in applicant's name on both copies).
*4 Envelope for submitting application	Fill in the sender's information on the back of the official envelope of this Graduate School and submit.
*5 Return envelope for examination admission ticket	Write your name and address (including postal number) on an official envelope of this Graduate School, and affix 92 yen in postage.
*6 Return envelope for results notification	Write your name and address (including postal number) on an official envelope of this Graduate School, and affix 530 yen in postage.

- **Applicants who live outside Japan should pay attention to the following notes.**

\*1. Written recommendation should be requested to the faculty member. The faculty member will obtain the official form from the office and submit it directly.

\*2. Photo ID sheet is not required. Only the photo should be submitted.

\*3 - \*6. Not required.

- **About acquiring VISA for examination (Temporary Visitor VISA)**

Applicants for the Master's Program at the Graduate School of Engineering, Tohoku University, who live outside Japan and need to acquire a "Temporary Visitor VISA (for examination)" should receive an "examination permit" which our university will issue after we receive your application. Those who require us to issue an "examination permit" should include a request letter (any format) along with their application documents. Applicants are also required to send a photo (5cm long × 4cm wide) in addition to the photo for the "photo ID". Please write down your name and the name of the department to which you have chosen to apply on the reverse side of the photo.

## 5. Examination and Selection

**Examination dates:** From Monday, March 4 to Wednesday, March 6, 2019 according to the attached schedule.

**Location:** Graduate School of Engineering, Tohoku University, Sendai, Japan

(Details will be sent directly to each applicant from the department to which the application is made.)

## 6. Announcement of Results

Results are scheduled to be posted around 5:00 p.m. on Monday, March 11, 2019, on the following website. (<https://www.eng.tohoku.ac.jp/>)

Notification of results will also be mailed to applicants. Please note that results cannot be given in response to telephone inquiries.

## 7. Enrollment Procedures, etc.

(1) The enrollment procedures are scheduled to be processed on Wednesday, March 20, 2019. Details of the enrollment procedures will be announced when the acceptance letter is mailed in early March, 2019.

(2) Fees necessary at the time of enrollment

(a) Admission fee: 282,000 yen (tentative)

(b) Tuition (first semester): 267,900 yen (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:** Information on the waiving of admission or tuition fees, or permission to defer payment to a later date, etc., will be provided in the enrollment procedures documents sent after the results notification.

## 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 Held by Incorporated Administrative Agencies” 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, 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) "Laboratory Introduction" (listing the specialties offered in each field) is available on the following website (<https://www.eng.tohoku.ac.jp/>) under the Admissions menu. Please refer to it when submitting your application.
- (2) **Applications by post are to be sent in the designated envelope as Registered Express Mail. Applicants who live outside Japan may use any envelope.** Applicants will not be automatically notified of the receipt of applications. **Those desiring notification should enclose a postcard with their return address along with their application.**
- (3) Submitted application documents and examination fees cannot be returned.
- (4) If you do not receive your examination admission ticket by ten days prior to the examination date, please contact the Graduate Academic Affairs Section, Graduate School of Engineering.
- (5) All other inquiries regarding application for admission should likewise be made to the Graduate Academic Affairs Section, Graduate School of Engineering.
- (6) When requesting printed application forms by mail, enclose a self-addressed return envelope for A4-sized documents (approximately 34 cm by 24 cm) with your name, address and postal code and with 250 yen postage affixed. You should attach a memo noting the type of application (the name of the selection program) and your phone number or e-mail address. The application forms are written in Japanese. Only applicants who live outside Japan may use downloaded application forms.
- (7) A separate call for applications will be issued for students with three years or more of university who are "recognized by this Graduate School of as having obtained the necessary credits with excellent grades."
- (8) Applicants desiring consultation regarding the need for special assistance or other consideration in taking the examination or conducting your studies should make a 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 Wednesday, January 9, 2019.

\*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 in taking the examination
- D) Any special considerations desired in the study environment
- E) Nature of any special considerations provided up to now
- F) Other relevant information about daily life circumstances
- G) Reference materials (if currently under treatment, enclose a medical certificate issued by your physician)

October 2018

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

+Appendix— Admission Screening Examination Schedule for April 2018 Enrollment in Master's Program

● Special Selection Program for Early Graduate Students

Department	Test Subjects	Date and Time	Description	Remarks
Mechanical Systems Engineering, Finemechanics, Robotics, Aerospace Engineering	English		At the time of application, submit an original TOEFL® or TOEIC® score sheet no older than two years before the entrance exam. Students whose native tongue is English should contact the department individually.	<p>(1) Written testing may be waived depending on the applicant's record as indicated on transcripts.</p> <p>(2) On the scope of each subject, inquire with your department or consult the Web sites below.  <a href="http://www.mech.tohoku.ac.jp/">http://www.mech.tohoku.ac.jp/</a></p> <p>(3) Calculators or devices such as watches and mobile phones with calculation or communication functions are not allowed in the examination room.</p> <p>Inquire with Department of Mechanical and Aerospace Engineering Academic Affairs Section for details.                      Phone: 022-795-7030</p>
	Math A (mandatory)	Mon., Mar. 4 10:30 to noon (assemble at 10:00)	Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations	
	Math B (mandatory)	Mon., Mar. 4 1:30 to 3:00 p.m.	Fourier series and Fourier transforms, Laplace transforms, partial differential equations	
	Specialized subjects (elective)*	Tue., Mar. 5 9:00 a.m. to noon (assemble at 8:30)	Thermodynamics, Fluid dynamics, Strength of materials, Dynamics of mechanical systems, Control engineering *Choose any two of the above listed five specialized subjects. The choice of subjects must be notified in advance through the department office.	
	Interview	Wed., Mar. 6 (time indicated by your department)	Questions about undergraduate thesis, etc. and research plans after entering this program.	

Department	Test Subjects	Date and Time	Description	Remarks
Quantum Science and Energy Engineering	English		At the time of application, submit an original TOEFL® or TOEIC® score sheet no older than two years before the entrance exam. Students whose native tongue is English should contact the department individually.	<p>(1) Written testing may be waived depending on the applicant's record as indicated on transcripts.</p> <p>(2) On the scope of each subject, inquire with your department or consult the Web sites below.  <a href="http://www.qse.tohoku.ac.jp/">http://www.qse.tohoku.ac.jp/</a></p> <p>(3) Calculators or devices such as watches and mobile phones with calculation or communication functions are not allowed in the examination room.</p> <p>Inquire with Department of Mechanical and Aerospace Engineering Academic Affairs Section for details.  Phone: 022-795-7030</p>
	Math A (mandatory)	Mon., Mar. 4 10:30 to noon (assemble at 10:00)	Differential and integral calculus, linear algebra, vector analysis, ordinary differential equations	
	Math B (mandatory)	Mon., Mar. 4 1:30 to 3:00 p.m.	Fourier series and Fourier transforms, Laplace transforms, partial differential equations	
	Specialized subjects (elective)*	Tue., Mar. 5 9:00 a.m. to noon (assemble at 8:30)	Thermodynamics, Fluid dynamics, Strength of materials, Dynamics of mechanical systems, Control engineering, Materials science, Electromagnetics, Quantum mechanics *Choose any two of the above listed eight specialized subjects. The choice of subjects must be notified in advance through the department office.	
	Interview	Fri., Mar. 6 (time indicated by your department)	Questions about undergraduate thesis, etc. and research plans after entering this program.	

Department	Test Subjects	Date and Time	Description	Remarks
Electrical Engineering, Communications Engineering, Electronic Engineering	English			Department inquiries: Electronic Information System and Applied Physics Academic Affairs Section Phone: 022-795-7186
	Basic subjects	Mon., Mar. 4, 9:30 to 11:30 a.m.		
	Specialized subjects	Tue., Mar. 5, 9:30 to 11:30 a.m.		
	Interview	Tue., Mar. 5 or Wed., Mar. 6 (time indicated by your department)		
Applied Physics	English			Department inquiries: Electronic Information System and Applied Physics Academic Affairs Section Phone: 022-795-7186
	Basic subjects	Mon., Mar. 4, 10:00 to 11:30 a.m.		
	Specialized subjects	Mon., Mar. 4, 1:00 to 3:15 p.m.		
	Interview	Tue., Mar. 5 From 9:00 a.m.		
Applied Chemistry, Chemical Engineering, Biomolecular Engineering	Basic subjects	Mon., Mar. 4 9 : 00 to noon		Department inquiries: Chemistry and Biomolecular Academic Affairs Section Phone: 022-795-7205 Website: <a href="http://www.che.tohoku.ac.jp/index-j.html">http://www.che.tohoku.ac.jp/index-j.html</a>
	Specialized subjects	Tue., Mar. 5. 9:00 to noon		
	English	Mon., Mar. 4 13:30 to 14:30 p.m.		
	Interview test	Tue., Mar. 5 (time indicated by your department)		
Metallurgy, Materials Science, Materials Processing	English			*Regarding inquiries, please contact the department. <a href="http://www.material.tohoku.ac.jp/admission/index.html">http://www.material.tohoku.ac.jp/admission/index.html</a> Phone: (Department head) +81(22)-795-7352, (Academic Affairs Section) +81(22)-795-7373
	Math	Mon., Mar. 4 1:00 to 2:30 p.m.		
	Specialized subjects	Tue., Mar. 5 9:00 to noon		
	Interview	Wed., Mar. 6 9:00 to noon		

Department	Test Subjects	Date and Time	Description	Remarks	
Civil and Environmental Engineering	English			Department inquiries: Civil Engineering and Architecture Academic Affairs Section Phone: 022-795-7489	
	Specialized subjects	Mon., Mar. 4, 9:30 to 11:00 a.m.			
	Specialized subjects	Mon., Mar. 4,			
	Interview	Mon., Mar. 4 or Tue., Mar. 5			
Architecture and Building Science	English			Department inquiries: Civil Engineering and Architecture Academic Affairs Section Phone: 022-795-7489	
	Specialized subjects	Mon., Mar. 4, 9:00 a.m. to noon 1:30 to 4:30 p.m.			
	Interview	Mon., Mar. 4 or Tue.Mar.5 (time indicated by your department)			
Management Science and Technology	System A	Written test (English, Field-specific etc.)	Mon., Mar. 4 and Tue., Mar. 5	Department inquiries: Office: TEL 022-795-3863 Website: <a href="http://www.most.tohoku.ac.jp">http://www.most.tohoku.ac.jp</a>	
		Interview	Wed., Mar. 6		
	System B	English			
		Math	Mon., Mar. 4, 9:30 to 11:30 a.m.		
		Field-specific test (written)	Mon., Mar. 4, 1:00 to 3:00 p.m.		
		Field-specific test (oral)	Tue., Mar. 5 from 9:00 a.m. or Wed., Mar. 6 from 9:00 a.m.		

志望専攻		専攻	受験記号番号
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\* Please DO NOT fill in the above blanks

FORM (1/4)

**In A4 sized (21cm × 29.5cm) printing**

2019 Academic Year

APPLICATION FOR SPRING ENROLLMENT IN MASTER'S PROGRAM

平成 31 年度

博士課程前期 2 年の課程入学願書

(For entry in April 2019)

(平成 31 年 4 月入学)

\* Check the applicable item (該当項目に印をつける)

Special Selection Program for Early Graduate Students

INSTRUCTIONS (記入上の注意)

1. The application should be typed if possible, or neatly handwritten in block letters. (明瞭に記入すること。)
2. Numbers should be in Arabic numerals. (数字は算用数字を用いること。)
3. Years should be written using the Anno Domini system. (年号はすべて西暦とすること。)
4. Proper nouns should be written in full and not abbreviated. (固有名詞はすべて正式な名称とし、一切省略しないこと。)

1. Name in full in native language \_\_\_\_\_  
 (姓名 (自国語)) (Family name) (First name) (Middle name)

(Gender)  
 Male (男)  
 Female (女)

In Roman block capitals \_\_\_\_\_  
 (ローマ字) (Family name) (First name) (Middle name)

2. Nationality \_\_\_\_\_  
 (国籍)

3. Date of birth (生年月日)

\_\_\_\_\_  
 Year (年) Month (月) Day (日) Age (as of April 1, 2019)  
 年齢 (2019 年 4 月 1 日現在)

4. Department and academic advisor in Japan (志望専攻名・受入(希望)教員名)

Department of \_\_\_\_\_ /  Prof.  Associate Prof.

5. Present status (現職)

Name of the employer: \_\_\_\_\_  
 (企業等の名称)

Section/department: \_\_\_\_\_  
 (所属部課等)

Employment duration: From \_\_\_\_\_ ~ up to now (現在に至る)  
 (在職期間) Year (年) Month (月) Day (日)

After entering to Tohoku University:  remain employed (在職のまま)  resign (退職)  
 (入学後)

\* Check the applicable item

6. Present address and telephone number, facsimile number, e-mail address  
(現住所及び電話, ファックス番号, E-mail アドレス)

現住所 (Present address) : \_\_\_\_\_

電話番号/FAX番号 (Telephone/facsimile number) : \_\_\_\_\_

E-mail address : \_\_\_\_\_

7. The institution you have graduated / will graduate. (卒業した, あるいは卒業予定の機関)

\_\_\_\_\_

Institution (機関)	Year (年)	Month (月)
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8. About the presentation of the score sheet (スコアシートの提出について)

- I submit a TOEFL score sheet or the score sheet of the TOEIC public test to the 235th.  
(TOEFL スコアシートまたは第235回までの TOEIC 公開テストのスコアシートを提出します。)
- I submit the score sheet of the 236th TOEIC public test by a predetermined method by Tuesday, January 22, 2019.  
(第236回 TOEIC 公開テストのスコアシートを所定の方法で平成31年1月22日(火)までに提出します。)

## 10. Educational background (学歴)

	Name and Address of School (学校名及び所在地)	Year and Month of Entrance and Completion (入学及び卒業年月)	Amount of time spent at the school attended (修学年数)	Diploma or Degree awarded, Major subject (学位・資格, 専攻科目)
Elementary Education (初等教育)  Elementary School (小学校)	Name (学校名)  Location (所在地)	From (入学)  To (卒業)	years (年)  and months (月)	
Secondary Education (中等教育)  Lower Secondary School (中学)	Name (学校名)  Location (所在地)	From (入学)  To (卒業)	years (年)  and months (月)	
Upper Secondary School (高校)	Name (学校名)  Location (所在地)	From (入学)  To (卒業)	years (年)  and months (月)	
Higher Education (高等教育)  Undergraduate Level (大学)	Name (学校名)  Location (所在地)	From (入学)  To (卒業)	years (年)  and months (月)	
Graduate Level (大学院)	Name (学校名)  Location (所在地)	From (入学)  To (卒業)	years (年)  and months (月)	
Total years of schooling mentioned above (以上を通算した全学校教育修学年数) as of April 1, 2019 (2019年4月1日現在)			years (年)	

\*If the blank spaces above are not sufficient for the information required, please attach a separate sheet.

((注) 上欄に書ききれない場合には、適当な別紙に記入して添付すること。)

11. State the titles or subjects of books or papers (including graduation thesis authored by the applicant), if any, with the name and address of the publisher and the date of publication.

(著書, 論文, (卒業論文を含む。))があればその題名, 出版社名, 出版年月日, 出版場所を記すこと。)

\*Please attach abstracts of those papers to this application. ((注) 論文の概要を添付のこと。)

## 12. Employment Record: Begin with the most recent employment, if applicable. (職歴)

Name and address of organization (勤務先及び所在地)	Period of employment (勤務期間)	Position (役職名)	Type of work (職務内容)
	From To		
	From To		

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-  
  
\* I swear the above is a true statement  
(上記のとおり相違ありません)

Date of application:  
(申請年月日)

\_\_\_\_\_

Applicant's signature:  
(申請者署名)

\_\_\_\_\_

Applicant's name  
(in Roman block capitals):  
(申請者氏名)

\_\_\_\_\_

(受験票, 合否通知書及び受験ビザを送付するための宛名ラベル)

\* Fill the receiver's name and address of examination admission ticket

To: _____
Address: _____ _____
<u>Postal code</u> _____ <u>TEL</u> _____
(examination admission ticket)

\* Fill the receiver's name and address of results notification

To: _____
Address: _____ _____
<u>Postal code</u> _____ <u>TEL</u> _____
(results notification)

\* Fill the receiver's name and address of "Temporary Visitor VISA (for examination)"

To: _____
Address: _____ _____
<u>Postal code</u> _____ <u>TEL</u> _____
("Temporary Visitor VISA (for examination)")