April 2020 Enrollment

Graduate School of Chemical Sciences and Engineering
Hokkaido University

Master’s Degree Program
(Master’s Course)

[2nd Round of Application]

Application Guidelines
(Including International Student Admission Information)

October 2019
Table of Contents

Overview of the Graduate School of Chemical Sciences and Engineering and the Division of Chemical Sciences and Engineering ............................................................ 1
Educational Goals and Admission Policy ................................................................. 1

I. General Admission
   1. Admission Quotas ........................................................................................................ 2
   2. Application Qualifications .......................................................................................... 2
   4. Application Period ...................................................................................................... 4
   5. Application Documents ............................................................................................. 4
   6. Where to Apply .......................................................................................................... 6
   7. Examination Fee ....................................................................................................... 6
   8. Submission of English Scores ................................................................................... 7
   9. Selection Method ....................................................................................................... 8
  10. Examination Schedule, Etc. ..................................................................................... 8
  11. Announcements of the Result .................................................................................. 8
  12. Enrollment Procedures and Expenses .................................................................... 8
  13. Important Notes ....................................................................................................... 9
  14. Long-Term Study Program ...................................................................................... 9
  15. Others .................................................................................................................... 9

II-1. International Student Admission (Residents in Foreign Countries)
   1. Admission Quotas ..................................................................................................... 10
   2. Application Qualifications ......................................................................................... 10
   3. Preliminary Review of Application Qualifications (Application Period, Etc.) ......... 11
   4. Application Period .................................................................................................. 11
   5. Application Documents .......................................................................................... 11
   6. Where to Apply ....................................................................................................... 12
   7. Examination Fee ..................................................................................................... 12
   8. Submission of English Scores .................................................................................. 13
   9. Selection Method ..................................................................................................... 14
  10. Examination Schedule, Etc. ................................................................................... 14
  11. Announcements of the Result .................................................................................. 14
  12. Enrollment Procedures and Expenses .................................................................... 15
  13. Important Notes ....................................................................................................... 15
  14. Long-Term Study Program ...................................................................................... 15
  15. Others .................................................................................................................... 15

II-2. International Student Admission (Residents in Japan)
   1. Admission Quotas ..................................................................................................... 16
   2. Application Qualifications ......................................................................................... 16
   3. Preliminary Review of Application Qualifications (Application Period, Etc.) ......... 17
   4. Application Period .................................................................................................. 17
   5. Application Documents .......................................................................................... 18
   6. Where to Apply ....................................................................................................... 18
   7. Examination Fee ..................................................................................................... 19
   8. Submission of English Scores .................................................................................. 19
   9. Selection Method .................................................................................................... 20
  10. Examination Schedule, Etc. ................................................................................... 20
  11. Announcements of the Result .................................................................................. 20
  12. Enrollment Procedures and Expenses .................................................................... 20
  13. Important Notes ....................................................................................................... 21
  14. Long-Term Study Program ...................................................................................... 21
Prescribed Forms for the Graduate School of Chemical Sciences and Engineering (Enclosed)

① Admission application, resume, examination admission card, and examinee photo card
② Return envelope for examination admission card (requires ¥384 in postage)
③ Contact information stickers used to mail the notification of exam results and other information
④ Examination fee payment information (with prescribed payment slip)
⑤ Field of study (research laboratory) preference indication form
⑥ English Score Reporting Form
⑦ Submission form for payment certificate
Overview of the Graduate School of Chemical Sciences and Engineering and the Division of Chemical Sciences and Engineering

Hokkaido University reorganized the Department of Chemistry in its Graduate School of Science along with three chemistry-related divisions in its Graduate School of Engineering (the divisions of Chemical Process Engineering, Biotechnology and Macromolecular Chemistry, and Materials Chemistry) to form the Graduate School of Chemical Sciences and Engineering and the Division of Chemical Sciences and Engineering in April 2010 (admission quotas in master’s course: 129; admission quotas in doctoral course: 38).

In the Graduate School of Chemical Sciences and Engineering, chemistry and biochemistry professors of science and engineering who are affiliated with the Faculty of Science, Faculty of Engineering, Research Institute for Electronic Science, Institute for Genetic Medicine, and the Institute for Catalysis work closely together on research and education activities. Researchers affiliated with the National Institute for Materials Science, National Institute of Advanced Industrial Science and Technology, RIKEN, and the National Cerebral and Cardiovascular Center participate as instructors in related fields. These diversely experienced instructors offer not only specialized lectures in the Molecular Chemistry and Engineering Course, Materials Chemistry and Engineering Course, and Biological Chemistry and Engineering Course, but also a rich diversity of classes, including lectures in English. As a result, they are able to provide instruction and research guidance so that students will be able to view the field of chemistry from both the perspectives of science and engineering and contribute to society in related fields.

Educational Goals

By providing a systematic education that integrates research findings in the various fields of chemistry, such as molecular chemistry, materials chemistry, and biochemistry, the Graduate School of Chemical Sciences and Engineering strives to equip students with both basic and advanced specialized knowledge in the field of chemistry; to cultivate individuals with broad-based knowledge, a strong sense of discernment, and the ability to use their knowledge in practical applications to meet the needs created by trends toward internationalization, advanced developments in science and technology, and interdisciplinary approaches; and to nurture students who have the depth of knowledge and skills necessary for conducting basic and applied research and who will therefore be well equipped to conduct innovative research going forward.

Admission Policy

The Graduate School of Chemical Sciences and Engineering accepts talented applicants who want to learn about the specialized fields of science and engineering and earn their master’s or doctoral degrees in the field of integrated chemistry as well as applicants who want to earn their doctoral degrees while continuing their employment. The graduate school also actively accepts international students. Admission periods are in April and October.

The master’s course entrance examination consists of written and oral exams in specialized subjects. The examination is administered to measure the applicant’s level of knowledge in basic and specialized subjects in his/her field of specialization, but considerations are made to ensure that a wide variety of applicants is accepted.

The doctoral course entrance examination consists of an oral assessment to evaluate the applicant’s specialized knowledge and research skills.

Also, in order to demonstrate the required knowledge and skills of English language, applicants are required to provide the score report of English proficiency exam.

In both the master’s and doctoral courses, applicants with particularly remarkable academic transcripts or especially impressive research and development experience at their companies or institutions may be exempt from taking the written exam.
I. General Admission

1. Admission Quotas

<table>
<thead>
<tr>
<th>Division</th>
<th>No. of Admission Quota</th>
<th>Division Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Sciences and Engineering</td>
<td>Several</td>
<td><a href="http://www.cse.hokudai.ac.jp">www.cse.hokudai.ac.jp</a></td>
</tr>
</tbody>
</table>

Note:
Please contact the research advisor of your first choice Research Lab for details about research field prior to your application.

2. Application Qualifications

(1) Individuals who have graduated or are expected to graduate from a Japanese university by March 2020

(2) Individuals who have been awarded or expect to be awarded a bachelor’s degree pursuant to Article 104, Clause 4, of the School Education Act (Act No. 26, 1947) by March 2020 (hereinafter referred to as “individuals with a bachelor’s degree from the National Institution for Academic Degrees and University Evaluation”)

(3) Individuals who have completed or are expected to complete 16 years of school education in a foreign country by March 2020 (hereinafter referred to as “individuals from a foreign educational system”)

(4) Individuals who have completed or are expected to complete 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country by March 2020 (hereinafter referred to as “individuals from a foreign educational system via correspondence course”)

(5) Individuals who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course or who are expected to complete such coursework by March 2020 (The completion of the coursework needs to be considered equivalent to the completion of 16 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

(6) Individuals who have received, or are expected to receive by March 31, 2020, a degree equivalent to a bachelor’s degree from a university or a school in a foreign country (as stipulated in Article 11, Item 5, either which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated in the preceding item at a foreign educational establishment within the public education system of the country concerned).

(7) Individuals who have completed a specialized course at a specialized training college on or after the date determined by the Japanese Minister of Education, Culture, Sports, Science, and Technology (The course must be designated by the minister, and the course term must be four years or more. It also must meet other standards established by the minister.) and individuals who are expected to complete such a course by March 2020
(8) Individuals designated by the Minister of Education, Culture, Sports, Science, and Technology (1953 Notice No. 5, Ministry of Education, Science and Culture)

(9) Individuals who, by March 2020, have attended a Japanese university for three years or more or individuals who, as of March 2020, meet one of the following:

- Those who have completed 15 years of school education in a foreign country
- Those who have completed 15 years of school education in a foreign country by taking a correspondence course in Japan offered by a school of that foreign country
- Those who have completed coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the subjects prescribed by Hokkaido University (hereinafter referred to as “individuals who apply through the early admission system”).

(10) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a Japanese university graduate based on an individualized admission qualification investigation and who will be 22 years of age as of March 31, 2020 (hereinafter referred to as “individuals who apply through an individualized admission qualification investigation”)

Notes:

If you have any questions regarding the application qualifications, contact the Administration Office of the Graduate School of Chemical Sciences and Engineering (hereafter referred to as “CSE office”).

3. Preliminary Review of Application Qualifications (Application Period, Etc.)

December 9 (Mon.) through December 12 (Thu.), 2019

We will conduct a preliminary review of application qualifications before accepting applications from individuals applying based on the following qualifications:

(7) Individuals who have completed a specialized course at a specialized training college
(9) Individuals who apply through the early admission system
(10) Individuals who apply through an individualized admission qualification investigation

Individuals applying based on the application qualifications listed above should submit the documents indicated in section 5, “Application Documents,” with the exception of item No. 2 (submission form for the validated portion of the prescribed payment slip), during this period.

The applicant should not pay the examination fee when requesting a preliminary review of application qualifications. The examination fee is to be paid as per instructions in the notes below. (Documents can be submitted from 9:00 a.m. to 5:00 p.m., on weekdays only. If you send your documents by postal mail, they must be received by the deadline indicated.)

Notes:

The results of the preliminary review of application qualifications will be mailed out around mid-January, 2020. Those who are deemed eligible to apply should pay the examination fee as per section 7, “Examination Fee,” during the period indicated in section 4, “Application Period.” After payment is made, please submit the validated portion (portion E) of the prescribed payment slip to the university. If you do not pay the examination fee by the deadline indicated, your application will not be processed.
Applicants residing outside Japan who are allowed to submit their applications via the Internet should follow the on-screen instructions to arrange payment of the examination fee and the administrative fee (¥500).

Note that Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

4. Application Period

January 14 (Tue.) through January 20 (Mon.), 2020

Individuals applying based on the application qualifications listed below should submit the documents listed in section 5, “Application Documents,” during this application period.

(1) Individuals who have graduated or expect to graduate from a university by March 2020
(2) Individuals with a bachelor’s degree from the National Institution for Academic Degrees and University Evaluation
(3) Individuals from a foreign educational system
(4) Individuals from a foreign educational system via correspondence course
(5) Individuals who have completed coursework in a school designated as equivalent to a university
(6) Individuals who have received a degree equivalent to a bachelor’s degree from a foreign university/school
(8) Individuals designated by the Minister of Education, Culture, Sports, Science, and Technology

If you send your documents by postal mail, it must be received by the deadline indicated.

(Documents can be submitted between 9:00 a.m. and 5:00 p.m. on weekdays only.)

5. Application Documents

<table>
<thead>
<tr>
<th>No</th>
<th>Documents to Be Submitted</th>
<th>Application Qualifications</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Admission application, resume, examination admission card, and examinee photo card</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>Prescribed forms</td>
</tr>
</tbody>
</table>
| 2  | Submission form for the validated portion of the prescribed payment slip                  | ○ ○ ○ ○ ○ ○ ○ ○ ○ ○       | Prescribed form
See section 7, “Examination Fee,” and complete the payment of the examination fee. |
| 3  | Transcript from the applicant’s (undergraduate) university or other school                | ○ ○ ○ ○ ○ ○ ○ ○ ○ ○       | (a) This is not required of graduates (or prospective graduates) or currently enrolled students of School of Science or School of Engineering, of Hokkaido University.  
(b) Those who have graduated (or expect to graduate) from a college of technology should submit transcripts of general and advanced courses. |
<table>
<thead>
<tr>
<th>No.</th>
<th>Documents to Be Submitted</th>
<th>Application Qualifications</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Certificate of graduation (or expected graduation) or completion (or expected completion)</td>
<td>○ ○ ○</td>
<td>(a) This is not required of graduates (or prospective graduates) or currently enrolled students of School of Science or School of Engineering, of Hokkaido University. (b) Those who have graduated (or expect to graduate) from a college of technology should submit a certificate of diploma conferment issued by the National Institution for Academic Degree and University Evaluation or a certificate of expected application for diploma conferment issued by the president of the college of technology.</td>
</tr>
<tr>
<td>5</td>
<td>Certificate of enrollment</td>
<td>○ ○ ○ ○ ○</td>
<td>This is not required of applicants currently enrolled in School of Science or School of Engineering, of Hokkaido University.</td>
</tr>
<tr>
<td>6</td>
<td>English score reporting form and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test)</td>
<td>○ ○ ○ ○ ○</td>
<td>Pursuant to section 8, “Submission of English Scores,” applicants must submit the English score reporting form (prescribed form) and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) taken in or after April 2017.</td>
</tr>
<tr>
<td>7</td>
<td>Envelope in which the examination admission card is to be mailed</td>
<td>○ ○ ○ ○ ○</td>
<td>Prescribed envelope (a) Write your name, address, and postal code on the envelope provided and affix ¥384 worth of postage stamps to it. (b) If your address changes after you submit your application, be sure to inform the CSE office.</td>
</tr>
<tr>
<td>8</td>
<td>Contact information stickers used to mail the notification of examination results and other information</td>
<td>○ ○ ○ ○ ○</td>
<td>Prescribed form (a) Write your name, address, and postal code on the stickers. (b) If your address changes after you submit your application, be sure to inform the CSE office.</td>
</tr>
<tr>
<td>9</td>
<td>Research laboratory preference indication form</td>
<td>○ ○ ○ ○ ○</td>
<td>Prescribed form Select and indicate the order of your laboratory preferences (top five) from the “List of Instructors and Their Fields of Research.”</td>
</tr>
<tr>
<td>10</td>
<td>Letter of recommendation from your academic advisor at the last school attended, etc.</td>
<td>○ ○ ○ ○ ○</td>
<td>Unspecified format</td>
</tr>
<tr>
<td>11</td>
<td>Envelope in which preliminary review results are to be mailed to the applicant</td>
<td>△ ○ ○ ○</td>
<td>A Japanese standard-sized, self-addressed envelope bearing ¥84 in postage is required.</td>
</tr>
<tr>
<td>12</td>
<td>A copy of your Residence card</td>
<td>△ △ △ △</td>
<td>This is required only for international student applicants. Those who live outside of Japan should submit a copy of their passport.</td>
</tr>
<tr>
<td>13</td>
<td>Certificate of completion or withdrawal from a graduate school, and a graduate school transcript</td>
<td>△ △ △ △</td>
<td>This is required only for international student applicants who have been enrolled in a graduate school program at some point in the past.</td>
</tr>
<tr>
<td>No.</td>
<td>Documents to Be Submitted</td>
<td>Application Qualifications</td>
<td>Notes</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------</td>
<td>---------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Letter of approval for taking the entrance examination</td>
<td>△</td>
<td>△</td>
</tr>
<tr>
<td>15</td>
<td>A document verifying that the applicant possesses the equivalent or greater academic skill as that of a university graduate</td>
<td>○</td>
<td>Unspecified format</td>
</tr>
</tbody>
</table>

Note: ○ indicates that the document is required; △ indicates that the document only needs to be submitted by specified individuals.

6. Where to Apply
Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: (+81)-11-706-7246

Note:
If your application is submitted by postal mail, be sure to use registered mail and write “Graduate School Admission Application” in red on the front of the envelope.

7. Examination Fee
¥30,000
(a) Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.
(b) Applicants should pay the examination fee at a bank or other financial institution (including Japan Post Bank) in Japan using the enclosed prescribed payment slip and attach the validated portion (portion E) of the payment slip to the submission form. Applicants residing outside Japan and admitted to apply via Internet should follow the on-screen instructions to arrange for payment of examination fee and the administrative fee (¥500).
(c) In principle, entrance examination fees are not refundable. Only the following cases are refundable:
  • If an individual paid the examination fee but did not apply for admission (did not submit an application or submitted an application that was not accepted).
  • If the examination fee was accidentally paid twice.
  • If an individual, who is not required to pay the examination fee has made payment.
8. Submission of English Scores

Submit your English score reporting form (prescribed form) at the time of application. Also, submit your English score sheets as follows.

Scores to Be Submitted

Either of the English-language proficiency examination score sheets listed in (a) or (b) below, from examinations taken in or after April 2017.

(a) TOEFL test official score sheet
Submit the Examinee Score Report sent to the examinee by the U.S. Educational Testing Service (ETS). A printout of test results posted online shall be considered invalid.
It takes about seven to eight weeks to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.
On the Score Report Preferences screen shown during the process of applying to take the TOEFL iBT test, be sure to select “Web-accessible Score Report and a printed copy mailed to you” to ensure that a Examinee Score Report is mailed to you.

(b) TOEIC L&R test score sheet
Submit the Official Score Certificate. A printout of test results posted online shall be considered invalid.
It takes about one month to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.

Please note that scores from examinations such as the TOEFL -ITP test score sheet, TOEFL IP test and TOEIC Bridge test shall be considered invalid.

Important Notes

(a) Even if you are unable to submit an English examination score sheet, your graduate school examination fee will not be refunded.
(b) If you have multiple score sheets, the best score submitted shall be used. Individuals who have already submitted scores at the time of application may submit new scores on during the period on February 12 (Wed.) to February 18 (Tue.), 2020.
(c) English score sheet will be returned after the exam date.

9. Selection Method

Admission decisions will be made comprehensively based on the examination results (written and oral), the score of TOEFL test/TOEIC test, academic transcript, etc.

10. Examination Schedule, Etc.

February 28 (Fri.), 2020

Note:
The oral examination schedule, examination venue, and other details will be provided when the examination admission card is sent out.

<table>
<thead>
<tr>
<th>Exam Date</th>
<th>Time</th>
<th>Examination Subject</th>
<th>Examination Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb.28 (Fri.)</td>
<td>10:00 to 11:30 a.m.</td>
<td>Specialized subject (Comprehensive Basic Chemistry)</td>
<td>To be specified when the examination admission card is sent out</td>
</tr>
<tr>
<td></td>
<td>1:00 p.m.</td>
<td>Oral examination</td>
<td></td>
</tr>
</tbody>
</table>
11. Announcement of the result

The examination admission numbers of those who passed the examination will be posted in the entrance hall of the School of Engineering, the first-floor hall of the School of Science Bldg. 2, and the first-floor hall of the School of Engineering’s Materials Engineering and Chemistry Bldg. at 4:30 p.m. (tentatively) on March 11 (Wed.), 2020. In addition, all examinees will be notified of their results individually.

(Information about whether an applicant has passed or failed the examination will not be provided over the phone.)

12. Enrollment Procedures and Expenses

Details regarding enrollment procedures are provided in the notifications mailed to those who have been accepted.

Enrollment fee: ¥282,000
First semester tuition for academic year 2020: ¥267,900 (total annual amount: ¥535,800)

Notes:
1. If any revision is made while the student is enrolled, the new amount will be applied from the time of the revision.
2. If the enrollment fee is not paid during the admission procedure period, the applicant will be treated as having no intent to enroll.
3. If tuition is not paid for one semester, the student will be expelled, and his/her record of enrollment will be deleted. If you are having problems paying tuition due to financial hardship, you may be eligible for a tuition exemption or deferral.

13. Important Notes

(1) Be sure to bring your examination admission card with you on the day of the entrance examination and place it on your desk.
(2) Incomplete applications may not be accepted. Be sure that there are no errors in your application.
(3) If the name on your certificate of graduation or other documents is different from your current name, for example, your surname has changed, attach a certificate of family registry or other official document that verifies the change.
(4) If any falsified information is found in the application documents, the applicant’s admission may be revoked.
(5) Our graduate school generally does not allow dual enrollment.

14. Long-Term Study Program

Our graduate school has a long-term study system. Those wishing to take advantage of this system should carefully read and follow the application instructions in the section entitled “Information on the Long-Term Study Program” on page 22.

15. Others

(1) Examination admission cards will be sent out in mid-February 2020 to those whose applications have been accepted.
(2) Applicants who are physically disabled and who may need special accommodations to take examinations and attend classes should notify the CSE office of their condition by January 20 (Mon.), 2020.
If you wish to receive a copy of the application guidelines by mail, send a self-addressed stamped envelope with your request. (The envelope should be large enough to fit an A4-sized booklet and be stamped with ¥250 worth of postage stamps or ¥540 if you prefer express delivery.) Address the outer envelope to CSE office and write “Request for Master’s Degree Program Application Guidelines” in red on the front. Also enclose a note indicating the telephone number where you can be reached.

If you have any questions regarding the application process, contact the office below.

Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: (+81)-11-706-7246
II-1. International Student Admission (Residents in Foreign Countries)

1. Admission Quotas

<table>
<thead>
<tr>
<th>Division</th>
<th>No. of Admission Quota</th>
<th>Division Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Sciences and Engineering</td>
<td>Several</td>
<td><a href="http://www.cse.hokudai.ac.jp">www.cse.hokudai.ac.jp</a></td>
</tr>
</tbody>
</table>

2. Application Qualifications

Individuals who are recognized as possessing the skills and capabilities required based on a recommendation from a specialized professor (hereinafter referred to as “the prospective supervisor”) in our graduate school whom the applicant would like to have as his/her research advisor after enrollment and individuals who fulfill one of the following application qualifications:

1. Individuals who have completed or are expected to complete 16 years of school education in a foreign country by March 2020

2. Individuals who have completed or are expected to complete 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country by March 2020

3. Individuals who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course or who are expected to complete such coursework by March 2020 (The completion of the coursework needs to be considered equivalent to the completion of 16 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

4. Individuals who have received, or are expected to receive by March 31, 2020, a degree equivalent to a bachelor’s degree from a university or a school in a foreign country (as stipulated in Article 11, Item 5, either which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated in the preceding item at a foreign educational establishment within the public education system of the country concerned).

5. Individuals who, by March 2020, have attended a university for three years or more or individuals who, as of March 2020, meet one of the following:
   • Those who have completed 15 years of school education in a foreign country
   • Those who have completed 15 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country
   • Those who have completed a coursework of a foreign country at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the subjects prescribed by Hokkaido University.
(6) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a university graduate based on an individualized admission qualification investigation and who will be 22 years of age as of March 31, 2020

Notes:

1. Applicants must contact their prospective supervisor in advance.
2. If you have any questions regarding the application qualifications, contact the Administration Office of the Graduate School of Chemical Sciences and Engineering (hereafter referred to as “CSE office”).

3. Preliminary Review of Application Qualifications (Application Period, Etc.)
   October 25 (Mon.) through October 31 (Thu.), 2019
   We will conduct a preliminary review of application qualifications before accepting applications from individuals applying based on the above-mentioned application qualification (5) or (6). The applicants should submit the documents indicated in section 5, “Application Documents,” with the exception of item No. 2 (submission form for the validated portion of the prescribed payment slip), during this period.
   The applicant should not pay the examination fee when requesting a preliminary review of application qualifications. The examination fee is to be paid as per instructions in the notes below.
   (Documents can be submitted from 9:00 a.m. to 5:00 p.m., on weekdays only. If you send your documents by postal mail, they must be received by the deadline indicated.)

   Notes:
   The results of the preliminary review of application qualifications will be mailed out around Early November, 2019. Those who are deemed eligible to apply should pay the examination fee as per section 7, “Examination Fee,” during the period indicated in section 4, “Application Period.” After payment is made, please submit the validated portion (portion E) of the prescribed payment slip to the university. If you do not pay the examination fee by the deadline indicated, your application will not be processed.
   Applicants residing outside Japan who are allowed to submit their applications via the Internet should follow the on-screen instruction to arrange payment of the examination fee and the administrative fee (¥500).
   Note that Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

4. Application Period
   November 11 (Mon.) through November 15 (Fri.), 2019
   If you send your application by mail, it must be received during this application period. (Documents can be submitted between 9:00 a.m. and 5:00 p.m. on weekdays only.)
## 5. Application Documents

<table>
<thead>
<tr>
<th>No.</th>
<th>Documents to Be Submitted</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Admission application, resume, examination admission card, and examinee photo card</td>
<td>Prescribed forms</td>
</tr>
</tbody>
</table>
| 2   | Submission form for the validated portion of the prescribed payment slip                   | Prescribed form  
Complete the payment in accordance with the “Notes” in section 3,  
“Preliminary Review of Application Qualifications (Application Period,  
Etc.),” and submit this form within the period shown in section 4,  
“Application Period.” |
| 3   | A recommendation letter from your prospective supervisor                                  | Unspecified format                                                                                               |
| 4   | A transcript from the applicant’s (undergraduate) university                               |                                                                                                                  |
| 5   | A certificate of graduation (or expected graduation)                                      |                                                                                                                  |
| 6   | English score reporting form and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) | Pursuant to section 8, “Submission of English Scores,” applicants must submit the English score reporting form (prescribed form) and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) taken in or after April 2017. |
| 7   | A recommendation letter from your academic advisor at the last university attended         | Unspecified format                                                                                               |
| 8   | Envelope in which the examination admission card is to be mailed                          | (Not required for those who live outside of Japan)                                                                |
| 9   | Contact information stickers used to mail the notification of examination results and other information | (Not required for those who live outside of Japan)                                                                |
| 10  | Envelope in which preliminary review results are to be mailed to the applicant             | (Not required for those who live outside of Japan)                                                                |
| 11  | Certificate of completion or withdrawal from a graduate school, and a graduate school transcript | This is required only if you had enrolled in a graduate school program in the past.                                 |
| 12  | A copy of your Passport                                                                   |                                                                                                                  |
| 13  | Other required documents from the accepting professor                                     |                                                                                                                  |

## 6. Where to Apply

Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)  
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan  
Tel: 011-706-7246  
Note:  
If your application is submitted by postal mail, be sure to use registered mail and write “Graduate School Admission Application” in red on the front of the envelope.
7. Examination Fee
¥30,000
(a) Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.
(b) Applicants should pay the examination fee at a bank or other financial institution (including Japan Post Bank) in Japan using the enclosed prescribed payment slip and attach the validated portion (portion E) of the payment slip to the submission form. Applicants residing outside Japan and admitted to apply via Internet should follow the on-screen instruction to arrange for payment of examination fee and the administrative fee (¥500).
(c) In principle, entrance examination fees are not refundable. Only the following cases are refundable:
• If an individual paid the examination fee but did not apply for admission (did not submit an application or submitted an application that was not accepted)
• If the examination fee was accidentally paid twice
• If an individual, who is not required to pay the examination fee has made payment.
Note:
For more detailed information on the methods of paying the examination fee, contact your accepting professor.

8. Submission of English Scores
Submit your English score reporting form (prescribed form) at the time of application. Also, submit your English score sheets as follows.

Scores to Be Submitted
Either of the English-language proficiency examination score sheets listed in (a) or (b) below, from examinations taken in or after April 2017.
(a) TOEFL test official score sheet
Submit the Examinee Score Report sent to the examinee by the U.S. Educational Testing Service (ETS). A printout of test results posted online shall be considered invalid.
It takes about seven to eight weeks to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.
On the Score Report Preferences screen shown during the process of applying to take the TOEFL iBT test, be sure to select “Web-accessible Score Report and a printed copy mailed to you” to ensure that a Examinee Score Report is mailed to you.
(b) TOEIC L&R test score sheet
Submit the Official Score Certificate. A printout of test results posted online shall be considered invalid.
It takes about one month to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.

Please note that scores from examinations such as the TOEFL -ITP test score sheet, TOEFL IP test and TOEIC Bridge test shall be considered invalid.
Important Notes
(a) Even if you are unable to submit an English examination score sheet, your graduate school examination fee will not be refunded.
(b) If you submit more than one score sheet, the best score submitted shall be used. Individuals who have already submitted scores at the time of application may submit new scores on during the period on November 25 (Mon.) to November 29 (Fri.), 2019.
(c) English score sheet will be returned after the exam date.

9. Selection Method
Admission decisions will be made based on a comprehensive review of the applicant’s knowledge of the subject matter, foreign-language skills, etc.

If you apply for a special program approved by the Graduate School of Chemical Sciences and Engineering, you may be exempt from taking the entrance examination, and thus may only be subject to the document review.

10. Examination Schedule, Etc.
December 13 (Fri.), 2019
Note:
The oral examination schedule, examination venue, and other details will be provided when the examination admission card is sent out.

<table>
<thead>
<tr>
<th>Examination Date</th>
<th>Time</th>
<th>Examination Subject</th>
<th>Examination Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 13 (Fri.)</td>
<td>9:00 a.m. or 1:00 p.m.</td>
<td>Oral Examination</td>
<td>To be specified when the examination admission card is sent out</td>
</tr>
</tbody>
</table>

11. Announcements of the Result
The examination admission numbers of those who passed the examination will be posted in the entrance hall of the School of Engineering, the first-floor hall of the School of Science Bldg. 2, and the first-floor hall of the School of Engineering’s Materials Engineering and Chemistry Bldg. at 4:30 p.m. (tentatively) on January 29 (Wed.), 2020. In addition, all examinees will be notified of their results individually.

Information about whether an applicant has passed or failed the examination will not be provided over the phone.

12. Enrollment Procedures and Expenses
Details regarding enrollment procedures are provided in the notifications mailed to those who have been accepted.
Enrollment fee: ¥282,000
First semester tuition for academic year 2020: ¥267,900 (total annual amount: ¥535,800)
Notes:
1. If any revision is made while the student is enrolled, the new amount will be applied from the time of the revision.
2. If the enrollment fee is not paid during the admission procedure period, the applicant will be treated as having no intent to enroll.
3. If tuition is not paid for one semester, the student will be expelled, and his/her record of enrollment will be deleted. If you are having problems paying tuition due to financial hardship,
you may be eligible for a tuition exemption or deferral.

13. Important Notes
(1) Be sure to bring your examination admission card with you on the day of the entrance examination and place it on your desk.
(2) Incomplete applications may not be accepted. Be sure that there are no errors in your application.
(3) If any falsified information is found in the application documents, the applicant’s admission may be revoked.
(4) Our graduate school generally does not allow dual enrollment.

14. Long-Term Study Program
Our graduate school has a long-term study system. Those wishing to take advantage of this system should carefully read and follow the application instructions in the section entitled “Information on the Long-Term Study Program” on page 22.

15. Others
(1) Examination admission cards will be sent out in Late November 2019 to those whose applications have been accepted.
(2) Applicants who are physically disabled and who may need special accommodations to take examinations and attend classes should notify the CSE office of their condition by November 15 (Fri.), 2019.

If you have any questions regarding the application process, contact the office below.
Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: +81-11-706-7246
II-2. International Student Admission (Residents in Japan)

1. Admission Quotas

<table>
<thead>
<tr>
<th>Division</th>
<th>No. of Admission Quota</th>
<th>Division Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Sciences and Engineering</td>
<td>Several</td>
<td><a href="http://www.cse.hokudai.ac.jp">www.cse.hokudai.ac.jp</a></td>
</tr>
</tbody>
</table>

2. Application Qualifications

Individuals who are recognized as possessing the skills and capabilities required based on a recommendation from a specialized professor (hereinafter referred to as “the prospective supervisor”) in our graduate school whom the applicant would like to have as his/her research advisor after enrollment and individuals who fulfill one of the following application qualifications:

(1) Individuals who have completed or are expected to complete 16 years of school education in a foreign country by March 2020

(2) Individuals who have completed or are expected to complete 16 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country by March 2020

(3) Individuals who have completed a coursework of a foreign university at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course or who are expected to complete such coursework by March 2020 (The completion of the coursework needs to be considered equivalent to the completion of 16 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

(4) Individuals who have received, or are expected to receive by March 31, 2020, a degree equivalent to a bachelor’s degree from a university or a school in a foreign country (as stipulated in Article 11, Item 5, either which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated in the preceding item at a foreign educational establishment within the public education system of the country concerned).

(5) Individuals who, by March 2020, have attended a university for three years or more or individuals who, as of March 2020, meet one of the following:

• Those who have completed 15 years of school education in a foreign country
• Those who have completed 15 years of school education of a foreign country by taking a correspondence course in Japan offered by a school of that foreign country
• Those who have completed a coursework of a foreign country at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by the Japanese Minister of Education, Culture, Sports, Science, and Technology.)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the subjects prescribed by Hokkaido University.
(6) Applicants who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a university graduate based on an individualized admission qualification investigation and who will be 22 years of age as of March 31, 2020

Notes:
1. Applicants must contact their prospective supervisor in advance.
2. If you have any questions regarding the application qualifications, contact the Administration Office of the Graduate School of Chemical Sciences and Engineering (hereafter referred to as “CSE office”).

3. Preliminary Review of Application Qualifications (Application Period, Etc.)
December 9 (Mon.) through December 12 (Thu.), 2019

We will conduct a preliminary review of application qualifications before accepting applications from individuals applying based on the above-mentioned application qualification (5) or (6). The applicants should submit the documents indicated in section 5, “Application Documents,” with the exception of item No. 2 (submission form for the validated portion of the prescribed payment slip), during this period.

The applicant should not pay the examination fee when requesting a preliminary review of application qualifications. The examination fee is to be paid as per instructions in the notes below.

Documents can be submitted from 9:00 a.m. to 5:00 p.m. on weekdays only. If you send your documents by postal mail, they must be received by the deadline indicated.

Notes:
The results of the preliminary review of application qualifications will be mailed out around mid-January, 2020. Those who are deemed eligible to apply should pay the examination fee as per section 7, “Examination Fee,” during the period indicated in section 4, “Application Period.” After payment is made, please submit the validated portion (portion E) of the prescribed payment slip to the university. If you do not pay the examination fee by the deadline indicated, your application will not be processed.

Applicants residing outside Japan who are allowed to submit their applications via the Internet should follow the on-screen instruction to arrange payment of the examination fee and the administrative fee (¥500).

Note that Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

4. Application Period
January 14 (Tue.) through January 20 (Mon.), 2020

If you send your application by mail, it must be received during this application period. (Documents can be submitted between 9:00 a.m. and 5:00 p.m. on weekdays only.)
### 5. Application Documents

<table>
<thead>
<tr>
<th>No.</th>
<th>Documents to Be Submitted</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Admission application, resume, examination admission card, and examinee photo card</td>
<td>Prescribed forms</td>
</tr>
<tr>
<td>2</td>
<td>Submission form for the validated portion of the prescribed payment slip</td>
<td>Prescribed form Complete the payment in accordance with the “Notes” in section 3, “Preliminary Review of Application Qualifications (Application Period, Etc.),” and submit this form within the period shown in section 4, “Application Period.”</td>
</tr>
<tr>
<td>3</td>
<td>A recommendation letter from your prospective supervisor</td>
<td>Unspecified format</td>
</tr>
<tr>
<td>4</td>
<td>A transcript from the applicant’s (undergraduate) university</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>A certificate of graduation (or expected graduation)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>English score reporting form and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test)</td>
<td>Pursuant to section 8, “Submission of English Scores,” applicants must submit the English score reporting form (prescribed form) and the score sheet of an English-language proficiency examination (TOEFL test or TOEIC test) taken in or after April 2017.</td>
</tr>
<tr>
<td>7</td>
<td>A recommendation letter from your academic advisor at the last university attended</td>
<td>Unspecified format</td>
</tr>
<tr>
<td>8</td>
<td>Envelope in which the examination admission card is to be mailed</td>
<td>Prescribed envelope (a) Write your name, address, and postal code on the envelope provided and affix ¥384 worth of postage stamps to it. (b) If your address changes after you submit your application, be sure to inform the CSE office.</td>
</tr>
<tr>
<td>9</td>
<td>Contact information stickers used to mail the notification of examination results and other information</td>
<td>Prescribed form (a) Write your name, address, and postal code on the stickers. (b) If your address changes after you submit your application, be sure to inform the CSE office.</td>
</tr>
<tr>
<td>10</td>
<td>Envelope in which preliminary review results are to be mailed to the applicant</td>
<td>A Japanese standard-sized, self-addressed envelope bearing ¥84 in postage is required.</td>
</tr>
<tr>
<td>11</td>
<td>Certificate of completion or withdrawal from a graduate school, and a graduate school transcript</td>
<td>This is required only if you had enrolled in a graduate school program in the past.</td>
</tr>
<tr>
<td>12</td>
<td>A copy of your Residence card</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Other required documents from the accepting professor</td>
<td></td>
</tr>
</tbody>
</table>

### 6. Where to Apply

Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: 011-706-7246

Note:
If your application is submitted by postal mail, **be sure to use registered mail and write “Graduate School Admission Application” in red** on the front of the envelope.
7. Examination Fee

¥30,000

(a) Japanese government (MEXT) scholarship students, China Scholarship Council (CSC) supported students, Hokkaido University President’s Fellowship recipients (as well as those who are expecting to receive one of these scholarships) and Hokkaido University Special Grant Program international students (as well as those who are expecting to receive one of these scholarships) may be exempt from paying the examination fee. If there is a possibility that you will be eligible for an exemption, please contact the CSE office in advance.

(b) Applicants should pay the examination fee at a bank or other financial institution (including Japan Post Bank) in Japan using the enclosed prescribed payment slip and attach the validated portion (portion E) of the payment slip to the submission form. Applicants residing outside Japan and admitted to apply via Internet should follow the on-screen instruction to arrange for payment of examination fee and the administrative fee (¥500).

(c) In principle, entrance examination fees are not refundable. Only the following cases are refundable:

• If an individual paid the examination fee but did not apply for admission (did not submit an application or submitted an application that was not accepted)
• If the examination fee was accidentally paid twice
• If an individual, who is not required to pay the examination fee has made payment.

Note:
For more detailed information on the methods of paying the examination fee, contact your accepting professor.

8. Submission of English Scores

Submit your English score reporting form (prescribed form) at the time of application. Also, submit your English score sheets as follows.

Scores to Be Submitted
Either of the English-language proficiency examination score sheets listed in (a) or (b) below, from examinations taken in or after April 2017.

(a) TOEFL test official score sheet
Submit the Examinee Score Report sent to the examinee by the U.S. Educational Testing Service (ETS). A printout of test results posted online shall be considered invalid.
It takes about seven to eight weeks to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.
On the Score Report Preferences screen shown during the process of applying to take the TOEFL iBT test, be sure to select “Web-accessible Score Report and a printed copy mailed to you” to ensure that Examinee Score Report is mailed to you.

(b) TOEIC L&R test score sheet
Submit the Official Score Certificate. A printout of test results posted online shall be considered invalid.
It takes about one month to receive scores after taking the examination, so be sure to take the examination early enough to get your scores in time.

Please note that scores from examinations such as the TOEFL -ITP test score sheet, TOEFL IP test and TOEIC Bridge test shall be considered invalid.
Important Notes
(a) Even if you are unable to submit an English examination score sheet, your graduate school examination fee will not be refunded.
(b) If you submit more than one score sheet, the best score submitted shall be used. Individuals who have already submitted scores at the time of application may submit new scores during the period on February 12 (Wed.) to February 18 (Tue.), 2020.
(c) English score sheet will be returned after the exam date.

9. Selection Method
Admission decisions will be made based on a comprehensive review of the applicant’s knowledge of the subject matter, foreign-language skills, etc.

If you apply for a special program approved by the Graduate School of Chemical Sciences and Engineering, you may be exempt from taking the entrance examination, and thus may only be subject to the document review.

10. Examination Schedule, Etc.
February 28 (Fri.), 2020
Note:
The oral examination schedule, examination venue, and other details will be provided when the examination admission card is sent out.

<table>
<thead>
<tr>
<th>Examination Date</th>
<th>Time</th>
<th>Examination Subject</th>
<th>Examination Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 28 (Fri.)</td>
<td>9:00 a.m. or 1:00 p.m.</td>
<td>Oral Examination</td>
<td>To be specified when the examination admission card is sent out</td>
</tr>
</tbody>
</table>

11. Announcements of the Result
The examination admission numbers of those who passed the examination will be posted in the entrance hall of the School of Engineering, the first-floor hall of the School of Science Bldg. 2, and the first-floor hall of the School of Engineering’s Materials Engineering and Chemistry Bldg. at 4:30 p.m. (tentatively) on March 11 (Wed.), 2020. In addition, all examinees will be notified of their results individually.

Information about whether an applicant has passed or failed the examination will not be provided over the phone.

12. Enrollment Procedures and Expenses
Details regarding enrollment procedures are provided in the notifications mailed to those who have been accepted.
Enrollment fee: ¥282,000
First semester tuition for academic year 2020: ¥267,900 (total annual amount: ¥535,800)
Notes:
1. If any revision is made while the student is enrolled, the new amount will be applied from the time of the revision.
2. If the enrollment fee is not paid during the admission procedure period, the applicant will be treated as having no intent to enroll.
3. If tuition is not paid for one semester, the student will be expelled, and his/her record of enrollment will be deleted. If you are having problems paying tuition due to financial hardship,
you may be eligible for a tuition exemption or deferral.

13. Important Notes
(1) Be sure to bring your examination admission card with you on the day of the entrance examination and place it on your desk.
(2) Incomplete applications may not be accepted. Be sure that there are no errors in your application.
(3) If any falsified information is found in the application documents, the applicant’s admission may be revoked.
(4) Our graduate school generally does not allow dual enrollment.

14. Long-Term Study Program
Our graduate school has a long-term study system. Those wishing to take advantage of this system should carefully read and follow the application instructions in the section entitled “Information on the Long-Term Study Program” on page 22.

15. Others
(1) Examination admission cards will be sent out in mid-February 2020 to those whose applications have been accepted.
(2) Applicants who are physically disabled and who may need special accommodations to take examinations and attend classes should notify the CSE office of their condition by January 20 (Mon.), 2020.

If you have any questions regarding the application process, contact the office below.
Administration Office, Graduate School of Chemical Sciences and Engineering, Hokkaido University (CSE Office)
Kita 13, Nishi 8, Kita-ku, Sapporo, 060-8628 Japan
Tel: +81-11-706-7246
Information on the Long-Term Study Program

1. Overview
This system is available to students who would not be able to complete the program within the standard course term (two years) due to full-time employment or other circumstances (including responsibilities related to the care of elderly or disabled family members or the raising of children) and therefore want a longer period of time to conduct their studies systematically. Students must file an application and may be approved for a systematically planned course of study (hereinafter referred to as “long-term study”) after an individual review.

2. Eligibility
Individuals who are applying for the long-term study program must meet one of the terms listed below, be unable to make a commitment to full-time studies as a consequence of the circumstances described, and would therefore like to extend in advance the number of years over which they will conduct their studies (research).
(1) Individuals who are engaged in full-time employment, such as those currently employed by government agencies or companies (excluding those who will continue to receive salaries while being relieved of their work duties), and self-employed individuals
(2) Individuals who are engaged in temporary or part-time employment that is deemed by this graduate school to adversely affect their studies
(3) Individuals who have responsibilities, such as raising children or caring for other family members, that are deemed by this graduate school to adversely affect their studies to the same degree as the responsibilities listed in item (2) above

3. Enrollment Period
The allowable length of period under the long-term study program is up to four years for the master’s degree program. Study periods for long-term study applicants are approved in one-year increments.

The maximum length of enrollment (including the period for time off, etc.) for a student who has been approved for long-term study is up to an additional two years beyond the approved long-term study period in the master’s degree program, the same maximum length of time as students under the standard term of study.

The period of time off that this graduate school will allow is the same for students under either the standard term of study or long-term study program, i.e., two years for master’s students.

4. Application Procedures
(1) Application Deadline
In general, those wishing to apply for the long-term study program should apply at the time they submit their admission applications.
(2) Submission of Documents
Submit the following documents to CSE Office
(a) An application for long-term study (form 1)
(b) A long-term study plan (form 2)
(c) Documents verifying your reasons for needing long-term study approval
(3) Review and Notification of Results
Applications for the long-term study program will be reviewed by the graduate school, and
applicants will be notified of the results of that review.  
(Notification of results: mid-March [tentatively])

5. Contraction or Extension of the Long-Term Study Period
   If deemed necessary by the graduate school, approval may be granted for a contraction or extension of the long-term study period once, and only once, during the student’s period of enrollment. However, the long-term study period can only be contracted from four years to three years (one year beyond the standard two-year course term).

6. Tuition
   The tuition of students who have been approved for the long-term study program shall be calculated in annual amounts by dividing the total tuition for the standard term of study (annual tuition × 2 years) by the number of years for which the long-term study has been approved. In cases where the tuition amount is revised or a change to the long-term study period is approved, tuition will be recalculated at that time. However, any tuition already paid will not be adjusted retroactively.
   ※Be sure not to pay the tuition for your current term of study until you are notified of whether your application for the long-term study program or a change thereof has been approved.

7. Other
   To request an application form or clarify any issues, contact CSE Office
Handling of Personal Information

(1) All personal information collected by Hokkaido University will be completely protected in compliance with the Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc., and other related acts and pursuant to the Hokkaido University Personal Information Management Regulations.

(2) Names, addresses, and other personal information provided to the university through application procedures will be used solely for (a) enrollee selection, (b) the announcement of exam results, (c) admission procedures, (d) surveys and research on enrollee selection methods, and (e) related processes.

(3) Some of these processes may be outsourced by the university to a contracted service provider (hereinafter referred to as “contractor”). All or some of the personal information provided by applicants may be provided to the contractor only as needed to perform the tasks for which it has been contracted.

(4) Personal information obtained through application procedures will be used only for those who are admitted for (a) school administration purposes (student registration, academic counseling, etc.), (b) student support services (health management, scholarship applications, etc.), and (c) tuition and other administrative purposes.

(5) Of the personal information described in item (4) above, only names and addresses will be used to facilitate communication with students from the Hokkaido University Frontier Foundation and organizations related to Hokkaido University, such as (a) the Hokkaido University Athletic Union, and (b) the Hokkaido University School of Engineering and School of Science Alumni Association.

October 2019

Graduate School of Chemical Sciences and Engineering, Hokkaido University
List of Instructors and Their Fields of Research

**Molecular Chemistry and Engineering Course**

<table>
<thead>
<tr>
<th>No. Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Quantum Chemistry</td>
<td>Professor Tetsuya TAKETSUGU</td>
<td>Development of &quot;Predictive&quot; Chemical Theory for Reaction, Electron, and Spectroscopy and programs, as well as advanced computational chemistry applications. First principle excited-state reaction dynamics, theory-guiding catalytic design with element strategy, development of a large-scale electronic structure theory, near-field molecular theory, reaction informatics.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>02 Theoretical Chemistry</td>
<td>Professor Katsuki TAKEZAKI</td>
<td>Development of new theories and computational programs aimed at predicting reaction pathways in molecules and materials, and their applications.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>03 Physical Chemistry</td>
<td>Professor Hiro MINAMIMOTO</td>
<td>Surface electrochemistry: detection, characterization and photocatalyst design of target molecules on solid surfaces under electrochemical potential control for novel photovoltaic conversion systems and interelectrode devices. Electrochemical synthesis of nano-materials with well-defined defect density, heteroatom insertion, and chirality for novel catalysts.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>04 Analytical Chemistry</td>
<td>Professor Haruo UENO</td>
<td>Analytical chemistry, photochemistry, and spectroscopy in minute dimensions including chemistry of single molecule/nanoparticles.</td>
<td>Faculty of Science</td>
</tr>
</tbody>
</table>

**Fine Chemical Reactions Unit**

<table>
<thead>
<tr>
<th>No. Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 Organic Reaction</td>
<td>Associate Professor Yasuzo YAMAMOTO</td>
<td>Synthetic organic chemistry, organometallic chemistry, development of catalytic organic reactions and catalytic asymmetric reactions using organoborane compounds, development of chiral catalytic process.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>06 Organoelement Chemistry</td>
<td>Professor Hajime ITO</td>
<td>The research purpose of our laboratory is development of novel catalytic processes and new functional materials in the field of organoelement chemistry. We aim to challenges to establish a new chemistry frontier that includes organoelemental, heteronuclear chemistry and coordination chemistry.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>07 Organic Synthesis</td>
<td>Professor Tatsuo ISHIYAMA</td>
<td>Molecular catalysis, catalytic asymmetric reactions, practical organic synthesis.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>08 Organic Transformations</td>
<td>Professor Yasuo ISHIKAWA</td>
<td>Development of metal nanocluster catalyst for direct synthesis of chemicals. Development of metal nanocluster catalyst for direct synthesis of chemicals.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>09 Organometallic Chemistry</td>
<td>Professor Takeshi OKUMA</td>
<td>Molecular design of heterogeneous catalysts and application to renewable energy and environmental protection. Depolymerization of biomass such as cellulose and chitin, low-temperature oxidation of ethylene and keeping freshness of vegetables and fruits, partial oxidation of methane and catalysis of non-precious materials.</td>
<td>Institute for Catalysis</td>
</tr>
<tr>
<td>10 Organic Chemistry I</td>
<td>Professor Ken SHIBATA</td>
<td>Development of environmentally benign organometallic chemistry. Design of homogeneous and supported metal complex catalysts.</td>
<td>Faculty of Science</td>
</tr>
</tbody>
</table>

**Catalytic Reaction Unit**

<table>
<thead>
<tr>
<th>No. Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Catalytic Transformation</td>
<td>Professor Atsushi TSUTSUMI</td>
<td>Molecular design of heterogeneous catalysts and application to renewable energy and environmental protection. Depolymerization of biomass such as cellulose and chitin, low-temperature oxidation of ethylene and keeping freshness of vegetables and fruits, partial oxidation of methane and catalysis of non-precious materials.</td>
<td>Institute for Catalysis</td>
</tr>
<tr>
<td>12 Macromolecular Science</td>
<td>Professor Takashi KATO</td>
<td>Development of supported metal catalysts for automobile emission control. Surface chemistry and surface spectroscopy for catalyst design.</td>
<td>Institute for Catalysis</td>
</tr>
<tr>
<td>13 Catalysis Theory</td>
<td>Professor Junya HASEGAWA</td>
<td>Theoretical and computational chemistry for catalysis and functional materials. Analysis of potential energy surface and molecular dynamics of catalytic reactions. Development of chemical concepts, theoretical and computational models, and first-principle molecular simulation method for catalyses and proteins.</td>
<td>Institute for Catalysis</td>
</tr>
</tbody>
</table>

**Chemical Process Engineering Unit**

<table>
<thead>
<tr>
<th>No. Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Chemical System Engineering</td>
<td>Professor Takasuke MATSUBARA</td>
<td>Catalytic reaction and/or separation processes, production of biomass waste-derived useful chemicals by catalysis, upgrading of heavy oil to lighter fuels by catalysis.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>15 Material Design and Engineering</td>
<td>Professor Shin MATSUDA</td>
<td>Material design and engineering, adsorption engineering, separation engineering, precise structural control of porous materials, development of new production systems of nanomaterials, development of devices for reaction and separation using nanomaterials, material recycling.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>16 Chemical Reaction Engineering</td>
<td>Professor Kazuo FUJITA</td>
<td>Chemical transformation of carbon dioxide to valuable organic chemicals. Preparation and catalytic properties of metal-free carbon alloy, Hydrogen production for fuel cell, Multiphase catalytic reaction system using supercritical fluids.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>17 Chemical Energy Conversion Systems</td>
<td>Professor Naoto TSUNOGUCHI</td>
<td>Clean carbon technology for efficient reduction of CO2 emissions: fundamental research about advanced and novel technologies for biomass, low rank coals, heavy oil residues and low-valued natural gas.</td>
<td>Faculty of Engineering</td>
</tr>
</tbody>
</table>

※Laboratory No.20 is not recruiting students for admission in April 2020.
※Laboratory No.27, No.28, No.33～No.36, No.46, No.49 are not recruiting Master’s Degree Program students.
<table>
<thead>
<tr>
<th>No.</th>
<th>Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Coordination Chemistry</td>
<td>Professor Masaki KATOH</td>
<td>Development of the chemistry concerning photocatalytic metal complexes. In particular, the construction of assembled metal complexes and the investigation of their structures, spectroscopic properties, and functionalities such as chronic bioaccumulation and photocatalysis.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>20</td>
<td>Condensed Matter Chemistry</td>
<td>Professor Susumu TAKEDA</td>
<td>Evaluation and control of physical and functional properties developed by hierarchical aggregation and condensation of atoms, molecules and ions such as supramolecular system, molecular magnetic and conductive materials, self-organized dynamics of dissipative system.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>21</td>
<td>Molecular &amp; Life Nonlinear Science</td>
<td>Professor Tamiaki KOMATSU</td>
<td>Practical-oriented theoretical chemistry: The fundamental principles of change and necessity of chemical reactions, and new concepts and methodologies to bridge theory and experiments for biological molecular systems.</td>
<td>Research Institute of Electronic Science</td>
</tr>
<tr>
<td>22</td>
<td>Inorganic Chemistry Unit</td>
<td>Professor Yutaka HENJIN</td>
<td>Inorganic solid state chemistry. Studies on magnetic and electronic properties of condensed matter including rare earth and 4d, 5d transition elements. Design of crystal/electronic structures, evaluation of magnetic and electronic properties, and development of new ferromagnets and superconductors.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>23</td>
<td>Structural Inorganic Chemistry</td>
<td>Professor Miki IKEUCHI</td>
<td>Preparation of emerging functional ceramics, microstructure control of ceramics and their property evaluation, new synchrotrons for optical, electromagnetic and chemical application. Growth of single crystals for optical devices.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>24</td>
<td>Inorganic Synthesis Chemistry</td>
<td>Professor Koichiro TADANAGA</td>
<td>Development of functional inorganic materials using liquid phase. Preparation of nano-structured thin films and materials for energy conversion and storage by solution processes.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>25</td>
<td>Solid State Chemistry</td>
<td>Professor Yoshinori SHIMADA</td>
<td>Synthesis and new functions of nano-structured solids and thin films including inorganic nanomaterials, organic semiconductors, spintronics devices and nanocarbons.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>26</td>
<td>Nanostructured Functional Materials</td>
<td>Professor Junji NISHI</td>
<td>Fabrication and characterization of new optical and electrical functional materials and magnetic devices with nanostructures to realize a strong coupling with photon or electron.</td>
<td>Research Institute of Electronic Science</td>
</tr>
<tr>
<td>27</td>
<td>Nano-Ceramics</td>
<td>Guest Professor Tetsuo UCHIMOSHI</td>
<td>Design of nano/microstructures and control of functional properties of new functional ceramics based on processing science of fine particles and powders.</td>
<td>National Institute of Materials Science</td>
</tr>
<tr>
<td>28</td>
<td>Applied Materials Chemistry</td>
<td>Professor Katsumi KATOH</td>
<td>Preparation of ceramics nanoparticles and their applications for biocatalysis and biosensing.</td>
<td>National Institute of Advanced Industrial Science and Technology</td>
</tr>
<tr>
<td>29</td>
<td>Electronic Materials Chemistry</td>
<td>Professor Kuniya AKIRI</td>
<td>Designing high performance and long life materials using surface finishing, electrochemistry and structural control techniques, physical chemistry of organic electronic materials and their application to electronic devices and computational chemistry.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>30</td>
<td>Interfacial Electrochemistry</td>
<td>Professor Hiroshi HABARAZI</td>
<td>Fabrication of functional oxide nanofilms, nanoporous films and functional surfaces using electrophotocatalytic processes, tailoring of novel materials for batteries and fuel cells for next generation.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>31</td>
<td>Advanced Materials Chemistry</td>
<td>Professor Kenji FUSHIKE</td>
<td>Development of strong-luminescent and opto-magnetic nano-materials based on photochemistry, advanced electrochemical analysis using novel micro-electrodes.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td>32</td>
<td>Material Chemistry</td>
<td>Guest Professor Kenta KOKADO</td>
<td>Discovery of new physical phenomena and development of new functional materials through fabrication of complex systems beyond their hierarchy from nanometer to millimeter by controlling intermolecular interactions among chemical and biological components.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>33</td>
<td>Functional Materials Chemistry</td>
<td>Professor Hidenori NOGUCHI</td>
<td>Fundamental study of chemical-electric energy conversion including novel batteries, and fuel cell catalyst, and genetically-engineered microbial electrode catalysts. In situ determination of geometric, electronic and molecular structures at solid/liquid interfaces and electron transfer dynamics by ultra fast laser spectroscopy.</td>
<td>National Institute for Materials Science</td>
</tr>
<tr>
<td>34</td>
<td>Superconducting Materials</td>
<td>Guest Professor Kazuhiro YAMAMURA</td>
<td>Emphasizes materials synthesis, advanced characterizations, and studies of materials properties, all aimed at developing materials that have potential for applications. We focus on strongly correlated electron, multi ferroic properties, half-metal properties, and the like.</td>
<td>National Institute for Materials Science</td>
</tr>
<tr>
<td>35</td>
<td>Photo Functional Materials</td>
<td>Guest Professor Jinshu YE</td>
<td>Research and development of nano-structured semiconductor materials with novel functionalities (photocatalyst, light converters, etc.), and their applications in the fields of environment preservation, new energy production, information technology, biomedical applications.</td>
<td>National Institute for Materials Science</td>
</tr>
<tr>
<td>36</td>
<td>Nano-Assembled Materials Chemistry</td>
<td>Guest Professor Masaharu SASAKI</td>
<td>Development of energy and environmental materials exhibiting electron, ion, and mass transport and stimulus-responsive properties using supramolecular and polymer chemistry and electrophotocatalysis, and their device applications including fuel cells and transistors. Design and synthesis of sophisticated molecules and electrode catalysts, control of nanoscale assembly, and advanced characterization using synchrotron radiation.</td>
<td>National Institute for Materials Science</td>
</tr>
</tbody>
</table>

※Laboratory No.20 is not recruiting students for admission in April 2020.
※Laboratory No.27, No.28, No.35, No.36, No.46, No.49 are not recruiting Master's Degree Program students.
### Biological Chemistry and Engineering Course

<table>
<thead>
<tr>
<th>No.</th>
<th>Laboratory</th>
<th>Staff</th>
<th>Research Contents</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>Biological Chemistry</td>
<td>Professor Kuniyuki SAKAGUCHI</td>
<td>Functional regulation of tumor suppressor-related proteins through post-translational modification and localization.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Eiji RAMADA</td>
<td>Function and evolution of oligomeric structure in tumor suppressor protein p53. Regulation of differentiation, metabolism, and function in immune cells.</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Biostructural Chemistry</td>
<td>Professor Koichi ISHMORI</td>
<td>Functional and structural characterization and molecular design of proteins using spectroscopy.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Tatsushi UCHIDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Bioorganic Chemistry</td>
<td>Professor Yota MURAKAMI</td>
<td>Studies of structure-function of chromatin and chromosome, which is involved in maintenance and expression of genetic information: studies of regulatory mechanism of cell shape and movement.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Masayuki TAKAHASHI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Shinya TAKAHATA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Bioanalytical Chemistry</td>
<td>Professor Masashi TOSHIKAWA</td>
<td>Development of bio- and medical-analysis systems using microdevices and new measurement technologies.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Hirofumi TAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Akihiko ISHIDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Masato MAEKI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Mechanistic Organic Chemistry</td>
<td>Professor Hisakazu OYAMA</td>
<td>Elucidation of mechanisms on enzymatic reactions in the biosynthesis of bioactive natural products, and their applications to the organic synthesis to provide useful chemical library.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Aoshiko MINAMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Chengwei LIU</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Tsunoo OZAKI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Organic Chemistry II</td>
<td>Professor Keiji TANINO</td>
<td>Total synthesis of natural products having a complex structure and novel bioactivities. Development of efficient methodologies and new reactions to construct polycyclic skeleton with various functional groups on the basis of carbocation chemistry, heterocumulon chemistry, and organometallic chemistry.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Takahiro SUZUKI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Kazumasa IRIUCHI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Chemistry of Molecular Assemblies</td>
<td>Associate Professor Shinjiro SATO</td>
<td>Synthesis and computational chemistry of functional molecular assemblies based on soft matter such as synthetic polymers and carbohydrate chains.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Takahiro YAMAMOTO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Polymer Chemistry</td>
<td>Professor Yoshihiro SATOH</td>
<td>Synthesis of various architecturally complex polymers: molecular design of functional polymers such as stimuli-responsive polymers and conductive polymers: the study of micro-phase separation using block copolymers: creation and application of environmental zero-waste macromolecular materials with multifunctions.</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Kenji TAKEDAMA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Takahiro ISHINO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Biosynthetic Chemistry</td>
<td>Professor Ken’ichi MATSUMOTO</td>
<td>Establishment of bio- and eco-friendly system for production of biodegradable plastics and immunologically related peptides by utilizing renewable biomass. Biotechnological production of industrial enzymes related to medicine, health care, and cosmetics based on biomolecular and genetic engineering.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Yoshitake OHI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Chikako HORI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Laboratory of Chemical Biotechnology</td>
<td>Guest Professor Tomohiro HIRAISHI</td>
<td>Macromolecular system for genetic diagnosis, structural and functional studies of DNA conjugates, and base-substituted type sensitive morphogenetic system. RIKEN</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guest Associate Professor Masahiro FUJITA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Applied Biochemistry</td>
<td>Professor Tohru DAIKU</td>
<td>Search for and characterization of novel primary/secondary metabolic pathways in microorganisms and their application for production of useful compounds by biosynthetic and metabolic engineering.</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Yasuharu SATOH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Yasuharu OGASAWARA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Cell Processing Engineering</td>
<td>Professor Motonobu TAKAGI</td>
<td>Cell-processing engineering (process development with stem cells, non invasive quality estimation of adherent mammalian cells, animal cell cultivation engineering for pharmaceutical production, cell control using clock genes, biosensor chemistry (structural analysis of cells and related enzymes)).</td>
<td>Faculty of Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate Professor Tomoki ERATA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Manoshi FLORIBARA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Cell Engineering</td>
<td>Guest Professor Toshiyuki HOSODA</td>
<td>Regenerative medicine, artificial organs, endovascular treatment, biomedical materials, cardiovascular medicine, vascular regeneration, cell therapy.</td>
<td>National Cerebral and Cardiovascular Center Research Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guest Professor Masako ISHIDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Kenju TATSUMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Medical Biochemistry Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Signaling in Cancer and Immunology</td>
<td>Professor Akira TAKAGI</td>
<td>Research on molecular mechanisms underlying cellular response to infection and cancer. (i) Pathogen recognition receptors (innate sensors) and their signaling pathways, (ii) Innate immune response against cancer.</td>
<td>Institute for Genetic Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lecturer Suguru SATOH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Toshihiko YAMADA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Molecular Oncology</td>
<td>Professor Yumi TANIGUCHI</td>
<td>Characterization of the interface between normal and transformed epithelial cells using various techniques of cell biology and biochemistry. Establishment of a novel type of cancer prevention and treatment.</td>
<td>Institute for Genetic Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lecturer Tatsushi TAMAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Professor Nobuyuki TANIMURA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

※Laboratory No.20 is not recruiting students for admission in April 2020.
※Laboratory No.27, No.28, No.33~No.36, No.46, No.49 are not recruiting Master's Degree Program students.