# Doctoral Program 2020 April (Spring) Admission

# Application Guidelines

[Special Entrance Examination for International Students I (Document screening)]

Application Period: October 18, 2019 — October 24, 2019

[Special Entrance Examination for International Students II (Oral examination)]

Application Period: December 2, 2019 - December 6, 2019

Date of examination: December 25, 2019

Akita University
Graduate School of International Resource Sciences

https://www.akita-u.ac.jp/shigen/

## **Admission Policy**

The Graduate School of International Resource Sciences of Akita University is willing to accept students with the following qualifications:

- 1. Those who are driven by a strong spirit of enquiry focused on resource, energy, and environmental issues to build a sustainable society and who want to acquire a high level of specialist knowledge, and take an active part in resource development.
- 2. Those who are motivated and creative, who have an understanding of international ethical considerations and discernment, and who want to operate as resource engineers and researchers equipped with advanced knowledge.
- 3. Those who want to utilize an environment and system that facilitates the learning of international and adult students who have abundant experience and an understanding of diverse values.

The Akita University's Graduate School of International Resource Sciences <u>Doctoral Program</u> welcomes students who are strongly motivated to operate on a global stage and in leadership positions in their particular specialist areas through the development of advanced engineering technologies and inquiry into scientific issues.

#### Department of Geosciences, Geotechnology, and Materials Engineering for Resources

- 1. Those demonstrating marked academic ability and problem-solving capacity in their specialty area, as well as strong ethics and an international perspective, who seek to acquire advanced specialist knowledge and undertake leading-edge research in the fields of resource and earth sciences and resource development and environmental science.
- 2. Those strongly motivated to become researchers and engineers operating internationally in fields related to resource exploration, new resource development, global environmental issues, and resource economics, etc.

All subjects are taught in English.

## **Confidentiality of Applicant Information**

The personal information of applicants from submitted documents and from entrance examinations is used by Akita University solely for the following purposes:

- · In matters related to selecting successful applicants (including related matters such as statistical processing).
- In the case of students who have completed enrollment procedures, post-admission enrollment management, academic guidance, matters related to student support and matters related to the collection of tuition fees.

# Special Entrance Examination for International Students I (Document screening)

# Doctoral Program 2020 April (Spring) Admission

#### **Graduate School of International Resource Sciences Akita University**

#### **Application Guidelines**

#### Special Entrance Examination for International Students I (Document screening)

Applicants must have received higher education in the field of the department and meet all academic requirements. They should to be people of integrity and must be recommended by their university president or the dean of their graduate school (or the dean of their department). Enrollment at Akita University must also be promised once the candidate is accepted.

#### 1. Number to be Admitted

Department	Number to be Admitted
Geosciences, Geotechnology, and Materials Engineering for Resource	a few

It is highly recommended that applicants consult with prospective faculty members about the desired field or topics for study before application. Faculty education and research areas are listed on page 21-22. Please send the name of your prospective faculty member to the following email address.

<Contact Address>

Admissions Office Akita University

E-mail: nyushi@jimu.akita-u.ac.jp

#### 2. Application Qualifications

- · The status of residence of an incoming student must be "College Student."
- · Non-Japanese nationals.
- Applicants must have received higher education in the field of their desired depaetment and meet
  all academic requirements. They should to be people of integrity and must be recommended by
  their university president or the dean of their graduate school (or the dean of their department).
  One of the five qualifications below must also be satisfied, and enrollment at Akita University
  must also be promised once the candidate is accepted.
  - (1) Have received a master's degree or professional degree overseas, or will acquire such a degree by March 2020.
  - (2) Have a degree from a foreign institution that is equivalent to a Japanese master's degree or will acquire it by the end of March 2020.
  - (3) Have received or will be able to receive a master's degree or a degree equivalent by the end of March 2020 by completing a correspondence course offered by a foreign institution in

Japan.

- (4) Have obtained special recognition from the Japanese Ministry of Education, Culture, Sports, Science and Technology (refer to Ministry of Education Notification 118, 1989).
- (5) Be 24 years of age or older on March 31, 2020, and is considered to have an academic ability that is equivalent to or higher than a master's degree recipient after an individual Application Qualification evaluation conducted by the Graduate School of Akita University.

#### Note:

- 1 Non-Japanese nationals who graduated from a Japanese university (or a Japanese master's program); or will complete such a program by March 2020, do not qualify for the Special Entrance Examination for International Students.
- 2 Applicants who are accepted based on the qualifications above, yet are later confirmed as not being able to complete the admission procedures by the deadline, will not be admitted. Details on admission procedures will be sent to all accepted students along with a Letter of Acceptance.
- 3 If the application is made on the basis of (4) or (5) above, the Pre-evaluation for Application Qualification is required prior to the submission of application.

#### 3. Pre-evaluation of Application Qualification

- (1) Applicants applying under requirement (4) of the Application Qualifications must have been engaged in research at such organizations as a college or a research institute for no less than two years doing postgraduate work and have been recognized by the Graduate School of Akita University as having the academic ability equivalent to a master's degree or higher based on the results produced from the said research.
- (2) Applicants applying under requirement (5) of the Application Qualifications must satisfy one of the following requirements:
  - 1) Be 24 years of age or older on March 31, 2020, and have graduated from such institutions as junior colleges, higher technical schools, or have completed courses in other educational institutions. The applicant must also have been acknowledged by the Graduate School of Akita University to have produced academic achievements equivalent to a master's degree thesis or higher in such forms as books, papers, presentations, reports, or patents.
  - 2) Have been engaged in the fields of science/engineering for no less than two years and have been recognized by the Graduate School of Akita University to have produced the academic achievement equivalent to a master's degree thesis or higher in such forms as books, papers, presentations, reports, or patents.
- (3) Applicants applying under requirements (4) or (5) of the Application Qualifications must

submit the following via their intended supervising professor:

a) Pre-evaluation Request for Application Qualification (attached herein), b) Academic Record for Approval of Application Qualification (Complete Curriculum Vitae overleaf of Pre-evaluation Request for Application Qualification.), c) Record of Academic Achievements (attached herein), d) Proof of Graduation/Completion, e) Academic Record Transcripts (official transcripts in a sealed envelope from the university or the faculty last attended) and f) copies of published papers, to the Admissions Office of Graduate School of Akita University for Pre-evaluation of Application Qualification. The request must be made from September 25, 2019 to no later than September 30, 2019. If mailed, please allow enough time for the documents to arrive at the office by the deadline of September 30, 2019.

- (4) Applicants will be notified of the results of the Pre-evaluation for Application Qualification by October 15, 2019.
- (5) Once approved for Application Qualification, applicants should proceed with the application procedures as specified herein.

#### 4. Application Period and Mailing Address

#### (1) Application Period:

From October 18, 2019 to no later than October 24, 2019.

- 1) If brought in person or by proxy, application documents will be accepted at the Admissions Office between 9:00 a.m. and 4:00 p.m.
- 2) If mailed, application documents must be sent by registered mail and "Application to Doctoral Program, Graduate School of International Resource Sciences" must appear in red on the front side of the envelope. The documents must reach the Admissions Office no later than 4:00 p.m. on October 24, 2019. Special attention should be paid in estimating the days needed for overseas delivery.

#### (2) Mailing address:

Admissions Office Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel: +81-18-889-3178 Fax: +81-18-835-9924

E-mail: nyushi@jimu.akita-u.ac.jp

#### 5. Application Procedures

#### (1) Documents to be submitted

#### 1 Letter of Recommendation

Recommendations must be written by the applicant's supervising instructor, and be signed by the president of the school or the dean of the graduate school.

 $^st$  Please specify if the recommendation is issued from a recognized overseas

#### partner university.

#### 2 Application for Admission

Requested information must be entered on the designated form (attached herein) Complete Curriculum Vitae overleaf of the Application for Admission.

\* Please specify if the recommendation is issued from a recognized overseas partner university.

#### 3 Photo ID Card

A frontal-view photograph of the applicant's face, without a hat, 4.5 cm x 3.5 cm in size and taken within three months prior to this application must be affixed to the designated area of the photo ID Card (attached herein).

#### 4 Certificate of Completion or Prospective Completion or Certificate of Graduation

Applicants who, either have or will receive a master's degree must submit a certificate of either completion or prospective completion of their Master's Program, signed by the university or the graduate school last attended. Applicants having completed undergraduate work only, must submit a graduation certificate issued by the university or the faculty last attended.

#### (5) Academic Record Transcripts

Official transcripts in a sealed envelope from the university or the faculty last attended must be submitted.

#### (6) Master's Thesis Abstract

An abstract must be written on the form (attached herein) using 600 words or less. In the case of an applicant with a prospective completion of a Master's Program, the title of the Master's Thesis and an outline of the research process must be entered on the form. If papers, academic presentations, or patent licenses are available in print, a copy of such should also be enclosed.

(Not needed if applying under requirements (4) or (5) of the Application Qualifications.)

#### 7 Research Plan

The desired field or topics for study must be explained in the outline of the research plan on the form (attached herein) in 300 words or less *upon consultation with the applicant's intended supervising professor*.

#### 8 Record of Academic Achievements

Books, papers, academic presentations, patents, practical new designs, or other specific activities in academic societies or within the community, are to be explained on the appropriate form (attached herein).

#### 9 Proof of Evaluation Fee Payment

Evaluation Fee is 30,000 yen.

When depositing from an overseas bank, please make sure that the fee is sent by Electronic wire transfer to the (below) bank account in yen. Payment made by other currency will not be accepted. Any cost for the transfer is to be paid by the applicant. Please enclose a copy of "application for remittance" when mailing the admission application documents.

1. Amount: 30,000 yen (The fee must be received in yen)

2. Remittance Method: Electronic wire transfer

3. Remittance Fee: to be paid by the payer

4. Remittance Period: August 29, 2019 - October 24, 2019 Japan time must be observed.

5. Remittance Information:

Bank Name: Akita Bank, Ltd.

Branch: Tegata Branch

Address: 160-1, Aza-Yamazaki, Tegata, Akita-shi, Akita, 010-0851 Japan

Account Number: 688502 Recipient: Akita University

Bank Identifier Code (SWIFT): AKITJPJT

#### Note:

a) When filling out the "Application for Remittance," please enter "Evaluation fee" as "Purpose of Remittance," and enter "applicant's name" in the message box.

- b) After remitting the evaluation fee, please send an e-mail notifying the Admissions Office as soon as possible. [E-mail: nyushi@jimu.akita-u.ac.jp]
- c) In case of remitting the evaluation fee from Japan, please send an e-mail to that effect to the Admissions Office.

The Admissions Office will give instructions to you.

Please do not make a remittance before receiving instructions.

- d) If the evaluation fee received does not meet the required amount of 30,000 yen, the application procedure will be considered incomplete, and the application will not be accepted. The Evaluation Fee will be returned to the applicant, but the remittance fee will be withheld.
- e) The Evaluation Fee is non-refundable in the case of non-acceptance or if the successful applicant deadlines to enroll.

#### 10 Other

- 1) Applicants who live in Japan and do not have Japanese citizenship must submit a certified copy of their resident card that indicates their Status of Residence and issued by the municipality where they reside and issued by the Ministry of Justice. A copy of the applicants passport showing a)Personal information page with photo and b)Visa with Status of Residence.
- 2) Applicants residing overseas must submit an authorized certificate of his/her family

register or proof of citizenship in the applicant's home country.

#### Note:

- a) Applicants who are permitted to apply on the basis of requirements (4)or(5) of the Application Qualification are exempt from submitting a graduation or completion certificate, but must submit sealed Academic Record Transcripts by the university last attended.
- b) From ① to ⑨ and ⑩ 2) if it is difficult to submit originals, please send an e-mail notifying the Admissions Office before deadline of application period. [E-mail : nyushi@jimu. akita-u.ac.jp]

#### (2) Important notices for submitting documents

- ① No application will be accepted unless all documents mentioned above are fully and accurately completed.
- 2 Once submitted, documents will not be returned to applicant for any reason.
- (3) If contact address entered in the application form changes after submission, the Admissions Office must be promptly notified of the change.
  - E-mail: nyushi@jimu.akita-u.ac.jp
- 4 Attached forms may be either hand-written or typed.

#### 6. Evaluation of Applicants

Screening for admission will be conducted based on analysis of all documents submitted.

#### 7. Pre-consultation for Disabled Applicants

As a preliminary step in the application process, disabled applicants (refer to the chart below) who need special consideration during either the application process or the program itself must submit a letter detailing the items listed below together with a medical certificate prepared by a doctor no later than September 30, 2019. Early consultation is recommended since advance preparation may be needed in cases of severe disability.

- ① Name, age, contact address, telephone number, and department choice.
- 2 Type and degree of disability.
- 3 Detailed explanation of care needed during application and course study.
- 4 Special preparation and care taken at the university last attended.
- (5) Description of everyday life.
- (6) Name, address, and telephone number of the university last attended.

If needs arise after the deadline of September 30, 2019 due to an accident or other contingency, please contact the Admissions Office immediately.

Type of Disability	Extent of Disability
Visual	Those with eyesight of less than 0.3 with both eyes (Universal Eyesight Test Chart) or who have ophthalmologic functional disorders that do not allow easy recognition of normal size letters or diagrams, even with the use of a magnifying glass.
Hearing	Those with an auditory capacity of more than 60 decibels (Audiometer testing) who have difficulty listening to normal talk even with a hearing aid.
Physical	<ol> <li>Those who are not capable of performing basic daily tasks such as walking or writing even with the use of orthopedic or prosthetic devices.</li> <li>Those with physical disabilities not as severe as the above but who need constant medical assistance and/or observation.</li> </ol>
Health	<ol> <li>Those who are under constant medical restrictions due to prolonged chronic respiratory, kidney, nervous system illness, malignant growth, or other disorder.</li> <li>Those placed under medical restrictions due to prolonged weak or feeble health.</li> </ol>
Other	Those not specifically mentioned above, yet require special consideration when either applying for admission or attending classes during the course of study.

Translated from the original by the Graduate School of Akita University.

#### Note:

- a) The above are in conformity with Article 22-3 of the School Education Law Enforcement Regulations.
- b) The above required information (items ①-⑥) are also requested if the applicant uses, on an everyday basis, common aids such as hearing aids, crutches, or a wheelchair.

#### 8. Acceptance Notification

Results are tentatively scheduled to be e-mailed to all applicants at 1:00 p.m on November 13, 2019. Therefore telephone inquiries will not be accepted. A letter of Acceptance will be sent to successful applicants.

#### 9. Promise of Enrollment

Accepted students must submit the Promise of Enrollment upon receipt of the Letter of Acceptance (a form enclosed with the Letter of Acceptance) to the Admissions Office no later than December 6, 2019. If this promise is not received by the deadline, it will be understood that enrollment will not take place.

#### 10. Admission Procedures

(1) Details for Admission Procedures will be sent to all who are accepted along with the Letter of Acceptance. Accepted students are strongly advised to come to Japan in time to complete

the Admission Procedures in person.

(2) School Fees (must be paid in Japanese currency)

1 Admission fee: 282,000 yen (subject to change)

2 Tuition: 267,900 yen for the first semester (535,800 yen for the first academic year) (subject

to change)

Note:

a) Admission fees paid will not be refunded for any reason.

b) The above school fees are projected amounts and are subject to change before or during

the course. Revised admission fees will apply to all new students if the revision takes place before the end of the Admission Procedure Period. If the tuition is revised at the

time of admission or during the course, the new tuition takes effect at the time of revision.

c) If a candidate cancels his/her admission before March 31, 2020, after completion of

the Admission Procedures due to unavoidable circumstances, the tuition paid may be

refunded upon the payer's request only after designated procedures are completed.

(3) Other information

1 Those with an excellent academic standing yet who have difficulty paying the admission

fee due to financial circumstances and those who demonstrate other financial needs

may be eligible upon screening to apply for financial aid. Those accepted will be either exempt from paying all or half of the admission fee, or may be allowed to pay the fee at a

later date.

2) Those with an excellent academic standing yet who have difficulty paying the tuition

due to financial circumstances and those who demonstrate other financial needs may be

eligible upon screening to apply for financial aid. Those accepted will be either exempt

from paying all, half or a third of the tuition, or may be allowed to pay the fee at a later

date.

Admissions Office Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel: +81-18-889-3178 Fax: +81-18-835-9924

E-mail: nyushi@jimu.akita-u.ac.jp

11. Obtaining a Visa

The first step in obtaining a visa is to apply for a Certificate of Eligibility at the Ministry of

Justice, Immigration Bureau in Japan. On behalf of those students who reside overseas, who have

been accepted after evaluation, and who are confirmed to have completed all the admission procedure

requirements, Akita University will apply for the Certificate of Eligibility upon the request of the

student. Upon receipt of the Certificate of Eligibility from the Immigration Bureau, Akita University will

then mail it to the student's address. The student is to submit his/her passport and the certificate to a

Japanese diplomatic office (Japanese Embassy or Japanese Consulate) in their home country. A visa

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will be issued approximately one week after submitting the above documents.

#### **Note:**

- a) Akita University International Exchange Center (hereafter referred to as the International Exchange Center) will request the residential status of "College Student" when applying for the Certificate of Eligibility upon the request of the student.
- b) Admission may be turned down by the student under unavoidable circumstances, but the student will be required to send the Certificate of Eligibility immediately back to the International Exchange Center along with a letter stating the reason for the cancellation.
- c) To ensure a prompt application process, applicants who commission the International Exchange Center to apply for the Certificate of Eligibility must make sure that all documents (explained below) are completely filled out and are submitted at the time of applying for the course. However, the immigration office may find it necessary to request additional documents.

#### Flow chart on how the college student visa is obtained:

① Submission of documents necessary for Certificate of Eligibility at the time of application for the course

(applicant → International Exchange Center)

- ② Completion of admission procedures after having been accepted (accepted student → Graduate School of International Resource Sciences)
- ③ Application for Certificate of Eligibility
   (International Exchange Center → Sendai Regional Immigration Bureau)
- ④ Issuance of Certificate of Eligibility
   (Sendai Regional Immigration Bureau → International Exchange Center)
- ⑤ Mailing of Certificate of Eligibility
  (International Exchange Center → accepted students)
- ⑥ Applying and obtaining of college student visa in the students' home country (Accepted student → Japanese Embassy or Japanese Consulate)
- 7 Entry into Japan under college student status

#### **Application Documents for Certificate of Eligibility**

\* Designated forms are available.

		Documents	No.of copies	Notes
*	(1)	Application for Certificate of Eligibility	1	Application forms and instructions are found at the Immigration Bureau in Japan web site.
*	(2)	Photo (40mm x 30mm)	1	The same photo used on the application form for the course must be pasted on the designated place of the Application for Certificate of Eligibility form.

(3)	Copy of passport (if issued)	1	All the pages where the applicant's information is entered must be photocopied and submitted.
(4)	Bank statement of your supporter	1 1	Please submit a certificate for everyone if there are multiple financial sponsors.

For any questions about a certificate of eligibility:

Akita University International Exchange Center

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel.: +81-18-889-2258

E-mail: ryugaku@jimu.akita-u.ac.jp

# Special Entrance Examination for International Students II (Oral examination)

#### Special Entrance Examination for International Students II (Oral examination)

#### 1. Number to be Admitted

Department	Number to be Admitted
Geosciences, Geotechnology, and Materials Engineering for Resources	a few

It is highly recommended that applicants consult with prospective faculty members about the desired field or topics for study before application. Faculty education and research areas are listed on page 21-22. Please send the name of your prospective faculty member to the following email address.

<Contact Address>

Admissions Office Akita University

E-mail: nyushi@jimu.akita-u.ac.jp

#### 2. Application Qualifications

- · The status of residence of an incoming student must be "College Student."
- · Non-Japanese nationals must meet any of the following criteria:
  - (1) Have received a master's degree or professional degree overseas, or will acquire such a degree by March 2020.
  - (2) Have a degree from a foreign institution that is equivalent to a Japanese master's degree or will acquire it by the end of March 2020.
  - (3) Have received or will be able to receive a master's degree or a degree equivalent by the end of March 2020 by completing a correspondence course offered by a foreign institution in Japan.
  - (4) Have obtained special recognition from the Japanese Ministry of Education, Culture, Sports, Science and Technology (refer to Ministry of Education Notification 118, 1989).
  - (5) Be 24 years of age or older on March 31, 2020, and is considered to have an academic ability that is equivalent to or higher than a master's degree after an individual Application Qualification evaluation conducted by the Graduate School of Akita University.

#### Note:

- ① Non-Japanese nationals who graduated from a Japanese university (or Japanese graduate Master's Program); or are expected to complete such a program by March 2020, do not qualify for the Special Entrance Examination for International Students.
- ② If the application is made on the basis of (4) or (5) above, the Pre-evaluation for Application Qualification is required prior to the submission of application.

#### 3. Pre-evaluation of Application Qualification

- (1) Applicants applying under requirement (4) of the Application Qualifications must be those who have been engaged in research at such organizations as a college or a research institute for no less than two years doing postgraduate work, and have been recognized by the Graduate School of Akita University as having the academic ability equivalent to a master's degree or higher based on the results produced from the said research.
- (2) Applicants applying under requirement (5) of the Application Qualifications must satisfy one of the following requirements:
  - 1) Be 24 years of age or older on March 31, 2020, and have graduated from such institutions as junior colleges, higher technical schools, or have completed courses in other educational institutions. The applicant must also have been acknowledged by the Graduate School of Akita University to have produced academic achievements equivalent to a master's degree thesis or higher in such forms as books, papers, presentations, reports, or patents.
  - 2) Have been engaged in the fields of science/engineering for no less than 2 years and have been recognized by the Graduate School of Akita University to have produced the academic achievement equivalent to a Master's Degree thesis or higher in such forms as books, papers, presentations, reports, or patents.
- (3) Applicants applying under requirements (4) or (5) of the Application Qualifications must submit the following via their intended a supervising professor:
  - a) Pre-evaluation Request for Application Qualification (attached herein), b) Academic Record for Approval of Application Qualification (Complete Curriculum Vitae overleaf of the Pre-evaluation Request for Application Qualification.), c) Record of Academic Achievements (attached herein), d) Proof of Graduation/Completion, e) Academic Record Transcripts (official transcripts in a sealed envelope from the university or the faculty last attended) and f) copies of published papers to the Admissions Office of the Graduate School of Akita University for Pre-evaluation of Application Qualification. The request must be made from October 23, 2019, to no later than October 28, 2019. If mailed, please allow enough time for the documents to arrive at the office by the deadline of October 28, 2019.
- (4) Applicants will be notified of the results of the Pre-evaluation for Application Qualification by November 26, 2019.
- (5) Once approved for Application Qualification, applicants should proceed with the application procedures as specified herein.

#### 4. Application Period and Mailing Address

#### (1) Application Period:

From December 2, 2019 to no later than December 6, 2019.

- 1) If brought in person or by proxy, application documents will be accepted at the Admissions Office between 9:00 a.m. and 4:00 p.m.
- 2) If mailed, application documents must be sent by registered mail and "Application to Doctoral Program, Graduate School of International Resource Sciences" must appear in red on the front side of the envelope. The documents must reach the Admissions Office no later than 4:00 p.m. on December 6, 2019. Special attention should be paid in estimating the days needed for overseas delivery.

#### (2) Mailing address:

Admissions Office Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel: +81-18-889-3178 Fax: +81-18-835-9924

E-mail: nyushi@jimu.akita-u.ac.jp

#### 5. Application Procedures

#### (1) Documents to be submitted

①, ② Application for Admission, Examination Admission Slip

Requested information must be entered on the designated form (attached herein).

#### ③ Photo ID Card

A frontal-view photograph of the applicant's face, without a hat, 4.5 cm x 3.5 cm in size and taken within three months prior to this application must be affixed to the designated area of the photo ID Card (attached herein).

4 Certificate of Completion or Prospective Completion or Certificate of Graduation

Applicants who, either have or will be able to get a master's degree must submit a certificate of either completion or prospective completion of their Master's Program signed by the university or the graduate school last attended. Applicants having completed undergraduate work only, must submit a graduation certificate issued by the university or the faculty last attended.

#### (5) Academic Record Transcripts

Official transcripts in a sealed envelope from the university or the faculty last attended must be submitted.

#### **(6)** Master's Thesis Abstract

An abstract must be written on the form (attached herein) using 600 words or less. In the case of an applicant with a prospective completion of a Master's Program, the title of the Master's Thesis and an outline of the research process must be entered on the form. If papers, academic presentations, or patent licenses are available in print, a copy of such should also be enclosed.

(Not needed if applying under requirements (4) or (5) of the Application Qualifications.)

#### 7 Research Plan

The desired field or topics for study must be explained in the outline of the research plan on the form (attached herein) in 300 words or less *upon consultation with the applicant's intended supervising professor whom the applicant.* 

#### **®** Record of Academic Achievements

Books, papers, academic presentations, patents, practical new designs, or other specific activities in academic societies or within the community, are to be explained on the appropriate form (attached herein).

#### 9 Proof of Evaluation Fee Payment

Pay the entrance examination fee of 30,000 yen (bank transfer fee will be separately charged) at the counter of Japan Post Bank or post office by using the enclosed Payment Handling Slip.(Do not pay via ATM.)

After the bank transfer, make sure that the "Certificate of Bank Transfer Reception (Customer's Copy)"has been date-stamped and affix the Certificate to the designated area. Also indicate the "applicant's name" and "desired department".

The entrance examination fee will not be refunded for any reason after the application documents have been received.

Remittance Period: October 30, 2019 - December 6, 2019

\* When depositing from an overseas bank, please contact Admissions Office beforehand.

#### 10 Label slip

Fill out the designated label slip (attached herein).

#### (1) Stamps totaling 374 yen for Express mail

This will require a combination of stamps.

\* In case of applying from overseas, please contact Admissions Office beforehand.

#### 12 Letter of Recommendation

Recommendations must be written by the applicant's supervising instructor in Japanese or English.

#### (13) Other

- 1) Applicants who live in Japan and do not have Japanese citizenship must submit a certified copy of their resident card that indicates their Status of Residence and by the municipality where they reside. A copy of the applicants passport showing a)Personal information page with photo and b)Visa with Status of Residence.
- 2) Applicants residing overseas must submit an authorized certificate of his/her family register or proof of citizenship in the applicant's home country.

#### Note:

- a) Applicants who are permitted to apply on the basis of the requirements (4) or (5) of the Application Qualification are exempt from submitting a graduation or completion certificate, but must submit sealed Academic Record Transcripts by the university last attended.
- b) From ① to ② and ③ 2) if it is difficult to submit originals, please send an e-mail notifying the Admissions Office before deadline of application period. [E-mail: nyushi@jimu. akita-u.ac.jp]

#### (2) Important notice for submitting documents

- ① No application will be accepted unless all documents mentioned above are fully and accurately completed.
- 2 Once submitted, documents will not be returned to applicant for any reason.
- (3) If contact address entered in the application form changes after submission, the Admissions Office must be promptly notified of the change.

E-mail: nyushi@jimu.akita-u.ac.jp

4 Attached forms may be either hand-written or typed.

#### 6. Evaluation of Applicants

- (1) Screening for admission will be determined by the combined results of an oral examination (presentation) and a document review.
- (2) The contents of the oral examination: About desired Research Areas, Master's Thesis, Research Plan and Record of Academic Achievements
- (3) Academic ability test(oral examination)
  - ① Date of examination: December 25, 2019

    Make sure to note the start time of your examination and the place of oral examination (presentation), which will be sent to you along with your examination admission slip.
  - 2 Place of examination:

Tegata campus Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

#### 7. Pre-consultation for Disabled Applicants

As a preliminary step in the application process, disabled applicants (refer to the chart below) who need special consideration during either the application process or the program itself must submit a letter detailing the items listed below together with a medical certificate prepared by a doctor no later than October 28, 2019. Early consultation is recommended since advance preparation may be needed in cases of severe disability.

- ① Name, age, contact address, telephone number, and department choice.
- ② Type and degree of disability.
- ③ Detailed explanation of care needed during application and course study.
- ④ Special preparation and care taken at the university last attended.
- 5 Description of everyday life.
- 6 Name, address, and telephone number of the university last attended.

If needs arise after the deadline of October 28, 2019 due to an accident or other contingency, please contact the Admissions Office immediately.

Type of Disability	Extent of Disability
Visual	Those with eyesight of less than 0.3 with both eyes (Universal Eyesight Test Chart) or who have ophthalmologic functional disorders that do not allow easy recognition of normal size letters or diagrams, even with the use of a magnifying glass.
Hearing	Those with an auditory capacity of more than 60 decibels (Audiometer testing) who have difficulty listening to normal talking even with a hearing aid.
Physical	<ol> <li>Those who are not capable of performing basic daily tasks such as walking or writing even with the use of orthopedic or prosthetic devices.</li> <li>Those with physical disabilities not as severe as the above but who need constant medical assistance and/or observation.</li> </ol>
Health	<ol> <li>Those who are under constant medical restrictions due to prolonged chronic respiratory, kidney, nervous system illness, malignant growth, or other disorder.</li> <li>Those placed under medical restrictions due to prolonged weak or feeble health.</li> </ol>
Other	Those not specifically mentioned above, yet require special consideration when either applying for admission or attending classes during the course of study.

Translated from the original by the Graduate School of Akita University.

#### Note:

- a) The above are in conformity with Article 22-3 of the School Education Law Enforcement Regulations.
- b) The above required information (items ①-⑥) are also requested if the applicant uses, on an everyday basis, common aids such as hearing aids, crutches, or a wheelchair.

#### 8. Acceptance Notification

Results are tentatively scheduled to be e-mailed to all applicants at 1:00 p.m on January 14, 2020. Therefore telephone inquiries will not be accepted. A Letter of Acceptance will be sent to successful applicants.

9. Admission Procedures

(1) Details for Admission Procedures will be sent to all who are accepted along with the Letter of

Acceptance.

(2) School Fees (must be paid in Japanese currency)

① Admission fee: 282,000 yen (subject to change)

2 Tuition: 267,900 yen for the first semester (535,800 yen for the first academic year) (subject

to change)

Note:

a) Admission fees paid will not be refunded for any reason.

b) The above school fees are projected amounts and are subject to change before or during

the course. Revised admission fees will apply to all new students if the revision takes place before the end of the Admission Procedure Period. If the tuition is revised at the

time of admission or during the course, the new tuition takes effect at the time of revision.

c) If a candidate cancels his/her admission before March 31, 2020, after completion of

the Admission Procedures due to unavoidable circumstances, the tuition paid may be

refunded upon the payer's request only after designated procedures are completed.

(3) Other information

① Those with an excellent academic standing yet who have difficulty paying the admission

fee due to financial circumstances and those who demonstrate other financial needs

may be eligible upon screening to apply for financial aid. Those accepted will be either

exempt from paying all or half of the admission fee, or may be allowed to pay the fee at a

later date.

2 Those with an excellent academic standing yet who have difficulty paying the tuition

due to financial circumstances and those who demonstrate other financial needs may be

eligible upon screening to apply for financial aid. Those accepted will be either exempt

from paying all, half or a third of the tuition, or may be allowed to pay the fee at a later

date.

Admissions Office Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel: +81-18-889-3178 Fax: +81-18-835-9924

E-mail: nyushi@jimu.akita-u.ac.jp

10. Other information

(1) On the day of the examination, make sure to bring your examination admission slip.

(2) For any questions about this examination

Admissions Office Akita University

1-1, Tegata Gakuen-machi Akita-shi 010-8502 Japan

Tel: +81-18-889-3178 Fax: +81-18-835-9924

E-mail: nyushi@jimu.akita-u.ac.jp

# Outline of the Graduate School of International Resource Sciences

# Outline of the Graduate School of International Resource Sciences

The Graduate School of International Resource Sciences was established to educate specialists with wide-ranging knowledge in fields from earth sciences through to resource development and environmental issues. Graduates will aim for achieving a sustainable society and operate as global leaders as a result of pursuing advanced studies and research backed by advanced knowledge and expertise in the fields of (1) resource and earth sciences and (2) resource development and environmental science. All subjects are taught in English.

#### 1. Organization

The Graduate School of International Resource Sciences comprises a two-year master's degree Program followed by a three-year Doctor's Degree Program based on the Faculty of International Resource Sciences. The three-year doctoral program has a different structure from the undergraduate and master's programs, comprising a single department (major)—Resource Science—with two divisions.

#### **Graduate School of International Resource Sciences Master's Program**

Department	Division	
Earth Resource Science	Earth Resource Science	
Earth Resource Engineering and	Earth Resource Engineering and	
Environmental Science	Environmental Science	

#### **Graduate School of International Resource Sciences Doctoral Program**

Department	Division
Department of Geosciences, Geotechnology,	Earth Resource Science
and Materials Engineering for Resources	Earth Resource Engineering and
	Environmental Science

#### 2. Outline of Departments and Course Content (as of August 2019)

#### Department of Geosciences, Geotechnology, and Materials Engineering for Resources

Despite the energy and resource conservation efforts of Japan and countries around the world, demand for energy and earth's crustal resources is expected to continue to rise, with 21st-century society facing the problem of mass consumption of resources and energy as well as global-scale environmental problems. These two sets of problems are closely interrelated, and resolving resource-related issues will require not only resource exploration and development based on progress of earth science but also a systematic understanding of resource science that takes into consideration resources material cycles, and economic elements.

This department entails education and research in leading-edge resource science ranging from science and technology related issues to exploration, production, and development. This department addresses environmental issues, and problems, as well as taking into account the generation of a diverse range of minerals by applying environmental friendly methods, energy, and other resources. Finally, this department also considers to resource economics and resource recycling. We aim to educate experts with a wide-ranging knowledge of resource science and advanced specialist knowledge who can meet societal needs. To this end, the Department of Resource Science comprises two divisions, Earth Resource Science and Earth Resource Engineering and Environmental Science.

#### Earth Resource Science Division

This division comprises education and research on exploration technologies for metal resources, non-metal resources and energy resources, etc., the explication of generation mechanisms and deposit in environments of resources. As a foundation for this, students also engage in education and research in resource geology, igneous petrology, as well as studies integrating various fields. The aim is to equip students not only with resource exploration skills but also the ability to predict and prevent natural disasters caused by seismic and volcanic activity, as well as the ability to handle energy development and environmental issues.

#### Earth Resource Engineering and Environmental Science Division

This division comprises science and technology education and research with full consideration to environmental protection, dealing primarily with those resource development technologies essential for the production and utilization of the resources contained in the Earth.

More specifically, students will engage with global resource development — energy, mineral, water, and other resources — with holistic consideration of both sciencetific and technologic aspects such as the resource environment, material cycles and resource exploration, as well as economic evaluations. Other fields of study will include crust and rock engineering from a systems engineering perspective, resource processing engineering, smelting engineering as a production technologies, and new recycling technologies applying various process technologies and environmental protection technologies.

## 3. Content of Education and Research Areas, Faculty Member in Charge and Subject Title

Division	Educatio	n and Research Areas	Faculty Member	Subject Title	
DIVISION	Field	Content	racuity Member	Subject Title	
Earth Resource Science	Resource geology	Analysis of optimal scientific and practical methods and tools for the study of the origin of mineral deposits and their exploration and assessment	Prof. Andrea Agangi	Advanced Economic Geology and Exploration	
		Genesis of ore deposits and minerals based on analyses of geological	Yasushi Watanabe	Genesis of Mineral Resources	
		geophysical and geochemical conditions	Takuya Echigo	Advanced Applied Mineralogy	
		Sedimentology, paleoceanography and fuel economic geology based on micropaleontology as the foundation for the exploration of petroleum, coal, natural gas and other resources	Associate Prof. Makoto Yamasaki	Advanced Applied Micropaleontology Advanced Paleoenvironmentology	
		Discussing and understanding the state of the art in modern paleoenvironmental research. Focus on understanding how current research relates to previous studies.	Stephen P. Obrochta	Current topics in Paleoenvironmental Study	
		Research of geoscientific theories and development of modern technologies for hydrocarbon resource exploration and exploitation		Modern Geoscientific Theory of Petroleum Exploration	
		Formation and mass transfer of and exploration methods for petroleum, natural gas and unconventional energies based on geological theory		Petroleum Geology	
	Igneous petrology	Interpretation of geochemical and mineralogical data from igneous rocks and related rocks to determine origins and processes of magmas		Magma Chemistry	
	Structural geology	Dynamic process and motion of earth's crust and upper mantle, fracture and deformation structures developed in rocks and minerals		Advanced Structural Geology	
Earth Resource Engineering and Environmental Science	Circulation of resource-environment substance	Genesis of mineral deposits and resource exploration based on the chemistry and isotope characteristics of ore-forming fluid, ore solubility, and mass transfer mechanisms	Daizo Ishiyama <sup>22</sup>	Advanced Ore Solution Chemistry	
		Useful and toxic elements in relation to resources and the global environment from a material cycle perspective		Advanced Environmental Chemistry	
	Geophysics	Elucidation of subsurface and surface structures using solid-earth geophysical methods		Applied Geophysics I	
		Elucidation of subsurface and surface structures through measurement and analysis using geophysical methods		Applied Geophysics II	
	Energy resource engineering	Theoretical and applied studies on the development of fluid energy resources such as petroleum, natural gas, and geothermal energy	Prof. Hikari Fujii	Energy Resource Engineering	
		Well engineering to drill and complete high- temperature/high-pressure deep boreholes for oil, gas and geothermal developments, scientific researches and other areas		Advanced Drilling Engineering	
	Rock engineering	Mechanical properties, evaluation methods and engineering usage of rocks and bedrock	Prof. Tadao Imai	Advanced Rock Mechanics	
		Theoretical and applied studies on the crust engineering necessary for advanced underground space utilization related to resource development and environmental protection	Associate Prof.	Advanced Crust Engineering	
	Mining Technologies	Application through an interdisciplinary approach, such as an ICT, Soft-computing and Robotics to create new mining technologies	Prof. Youhei Kawamura	Advanced Mine Geotechnical Engineering	
	Mineral and resource processing	Development and application of advanced mineral processing technologies in relation to mineral resources, recycling and wastewater treatment		Applied Mineral Processing	
		Key technique and evaluation method for extracting metals from mineral resources and waste materials using hydrometallurgy		Advanced Separation Engineering	

Division Education and Research Areas		Faculty Mambar	Subject Title		
Division	Field	Content	Faculty Member	Subject Title	
Earth Resource Engineering and Environmental Science	Applied process engineering	Theoretical and applied studies on the development of pyro/hydro metallurgical and the recovery of useful elements from waste	Associate Prof. Yasushi Takasaki	Recycling and Refining Engineering  Applied Material Production Engineering	
	Mineral and environment economics	Empirical analysis of economics and finance, sustainable resource supply and utilization using systems modelling, and environmental assessments and their proposals		Mineral Economics and Systems Engineering	
	Resource Management	Theoretical and applied studies on the development of environmental resource management, environmental and social impact assessment, community relations, and corporate social responsibility, associated with the resources sector	Prof. Hiroshi Nawata	Advanced Resource Management	

<sup>22:</sup> These professors will retire in March 2022 in accordance with the mandatory retirement regulation.

#### 4. Completion Requirements and Degree Awarded

The Graduate School of International Resource Sciences comprises a two-year master's degree Program followed by a three-year Doctor's Degree Program based on the under graduate Faculty of International Resource Sciences. The three-year doctoral program has a different structure from the undergraduate and master's programs, comprising a single department (major) — Resource Science — with two divisions.

A Doctoral Degree either in Resource Science or Science is awarded to students majoring in Earth Resource Science, and in either Resource Science or Engineering to students majoring in Earth Resource Engineering and Environmental Science, who have satisfied the following requirements: at least three years' residence in the Doctoral Program; acquisition of a minimum of 12 course credits as stipulated in the chart below; an acceptable doctoral thesis; and a pass mark in the final comprehensive evaluation, based on the necessary guidance from faculty members.

A minimum period of three years, that may include the residence period in the Master's program, may be considered sufficient to receive the degree if the student demonstrates exceptional research achievement.

In the case of students who have entered the program with the qualifications noted in (2) to (5) in the application qualifications, a minimum period of one year may be considered sufficient to receive the degree if the student demonstrates exceptional research achievement.

### Credits Needed for the Completion of the Doctoral Program

Courses	Credits Required	Remarks
A Courses	A minimum of 4 credits (elective)	A minimum of 4 credits from the courses offered by the division of which the head supervisor is a member <advance ability="" and="" basic="" cultivate="" for="" knowledge="" needed="" projects="" research="" skills="" specialist="" the=""></advance>
B Courses	A minimum of 2 credits (elective)	A minimum of 2 credits from the courses offered by divisions of which the head supervisor is NOT a member <advance ability="" and="" basic="" cultivate="" for="" knowledge="" needed="" projects="" research="" skills="" specialized="" the=""></advance>
Intensive Training	2 credits (required)	Study of the latest literature written on the research theme and peripheral fields; Instructions are given in a seminar-style. <handled by="" group="" supervisory="" the=""></handled>
Thesis Plan	* (required)	The "proposal" method to evaluate doctoral thesis by the supervisory group <as a="" and="" are="" each="" evaluation.="" given="" is="" of="" only="" orally.="" paper="" permission="" preparatory="" present="" proposal="" receive="" satisfactory="" section="" step,="" structure="" students="" summaries="" the="" thesis="" those="" to="" who="" write=""></as>
Education Experience	* (required)	Select one: (1) Assist undergraduate or Master's Program students with lab work studies (2) Assist undergraduate or Master's Program students with speech drafts and presentation skills in preparation for academic lectures and symposiums. (3) Assist outside businesses by providing research and technical guidance to their production and development staff.
Experiments	4 credits (required)	Acquire advanced leading-edge skills in relation to research papers and develop a new field to be added to the curriculum, cultivating the ability to apply skills and knowledge to new challenges.
Total	A minimum of 12 credits	

Note: Asterisks(\*) indicate subjects which are required but earn no credits.

Those students affiliated with research institutes belonging to government ministries or companies, etc., (including those who have held such affiliations in the past) may exchange Education Experience (required; no credits) for B Courses (2 credits), particularly if they are considered to have sufficient research or technical guidance experience.

## Doctoral Program 2020 April (Spring) Admission

## Graduate School of International Resource Sciences, Akita University

# **Application for Admission**

Classfication	I (Document screening ) • II (Oral examination )					
Application No.	*					
Desired Field						
Desired Supervisor						
Name of Applicant					Sex	Male / Female
Date of Birth		month	/ day	/ year	- Sex	Male / Female
	Undergraduate I		,	,	· · · · · · · · · · · · · · · · · · ·	
	Name of So					
	Depart					
Educational	Date of Gradu	ation:				
History	Postgraduate Le	evel				
	Name of So	chool:				
	Course/N	/lajor:				
	Date of Compl	etion:				
			Fron	n overseas partner	university	recommendation
	Name of Employe	er				
Current	Address:					
Employment						
	Tel.:			postal code	count	ny
Q.,	Address:					
Current Address						
Addiess	Tel.: E-mail address:			postal code	count	ry
	Address:					
Contact	1.23.000.					
Address						
	Tel.:			postal code	count	ry

#### Note:

- 1. \* Official use only.
- 2. Please use BLOCK LETTERS and BLACK INK
- 3. Contact Address is where applicant wishes to receive correspondence.
- 4. Detailed information is requested in the Curriculum Vitae.

# **Curriculum Vitae**

**Educational Background** 

School Name	Required Number of Years Schooling you have attended	Year and Month of Entrance and Completion (YYYY / MM)	Diploma or Degree Awarded
Elementary Education / Elementary School	Years	From	
		То	
Secondary Education / Lower Secondary School	Years	From	
		То	
Secondary Education / Upper Secondary School	Years	From	
		То	
Higher Education / Undergraduate level	Years	From	
		То	
Higher Education / graduate level	Years	From	
		То	
	Years	From	
		То	
	Years	From	
		То	

**Employment Record** 

Employer	Position	Pe	eriod of employment (YYYY / MM)
		From	to

C	(ua	litica	tions	and	Licenses
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	Date
	Date
	Date

### **Achievements**

	Date
	Date

# Doctoral Program 2020 April (Spring) Admission Graduate School of International Resource Sciences Akita University

## **Photo ID Card**

Classification	I ( Document screening ) • II ( Oral examination )
Application No.	**
Name	
Desired Field	
Desired Supervisor	
	Please paste ID photo. (4.5cm x 3.5cm) Upper frontal view of applicant without a hat.
	<u> </u>

#### Note:

- 1. \* Official Use Only
- 2. Photo must be taken within 3 months prior to application.

# Doctoral Program 2020 April (Spring) Admission Graduate School of International Resource Sciences Akita University

# **Examination Admission Slip**

Classification	II (Oral examination)
Application No.	*
Name	
Desired Field	
Desired Supervisor	
	Please paste ID photo. (4.5cm x 3.5cm) Upper frontal view of applicant without a hat.

#### Note:

- 1. \* Official Use Only
- 2. Photo must be taken within 3 months prior to application.

# Master's Thesis Abstract (No. 1)

Classification	I ( Document screening ) • II ( Oral examination )
Application No.	*
Applicant's Name	
Graduate School Attended	
Desired Field	
Desired Supervisor	
Master's Thesis Title	

# Master's Thesis Abstract (No. 2)

Classification	I (Document screening) • II (Oral examination)
Application No.	*
Applicant's Name	
Desired Field	
Desired Supervisor	

## Research Plan

Classification	I (Document screening) • II (Oral examination)
Application No.	*
Applicant's Name	
Desired Field	
Desired Supervisor	

## Record of Academic Achievements (No. 1)

Classification	I ( Document screening ) • II ( Oral examination )
Application No.	*
Applicant's Name	
Desired Field	
Desired Supervisor	
Titel of Master's Thesis	
Employment History	
Description of pa	st work related to research (300 words or less)

Note: 1. \*Official Use Only 2. Title of Master's Thesis is not required if the applicant has not written a thesis.

## Record of Academic Achievements (No. 2)

Classification		I ( Document scre	eening) • II (Oral exa	mination )
Application No.	*			
Applicant's Name				
Desired Field				
Desired Supervisor				
Titles of papers, presen patents, e	tations, reports,	Year, volume, page, etc.	Name of publisher, journal, academic society, etc.	Other (Co-author or co-presenter)

Note: 1. 

Office use only.

Enter the information in chronological order.

Copies of academic papers are required.

# Pre-evaluation Request for Application Qualification

I intend to apply for the Doctoral P	•	,	• .			
International Resource Sciences under 🏋	Requirement (4)	or (5) of the	e Application	Qualificatio	n. I here	by
request for the Pre-evaluation of Application $\overline{C}$	Qualification.					
			※ Circle (4) of the control of	or (5), whicheve	er is applica	ble

Date:		/	-l	/		
	montn		day	year	•	
Name of Applicant:						
Address:						
Tel.Number:						
E-mail address:						
Classification:						
Desired Field:						
Last School Graduated from:						
Last School Graduated from:			(Enter n	ames of fa	aculty and o	course.)
Date of Graduation:			/		/	
Date of Graduation.		month		day	year	
Present Position:		<u> </u>				1.111
		(Enter	organiz	ation, dep	artment, ar	nd title.)

## **Curriculum Vitae**

**Educational Background** 

School Name	Required Number of Years Schooling you have attended	Year and Month of Entrance and Completion (YYYY / MM)	Diploma or Degree Awarded
Elementary Education / Elementary School	Years	From	
		То	
Secondary Education / Lower Secondary School	Years	From	
		То	
Secondary Education / Upper Secondary School	Years	From	
		То	
Higher Education / Undergraduate level	Years	From	
		То	
Higher Education / graduate level	Years	From	
		То	
	Years	From	
		То	
	Years	From	
		То	

**Employment Record** 

Employer	Position	Period of employment (YYYY / MM)	
		From	to

C	(ua	litica	tions	and	Licenses
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	Date
	Date
	Date

### **Achievements**

	Date
	Date

### **Doctoral Program** 2020 April (Spring) Admission

### Graduate School of International Resource Sciences, Akita University

## Academic Record for Approval of Application Qualification

Classification	I (Document screening) ⋅ II (Oral examination)
Application Number	*
Applicant's Name	
Date of Birth (age)	
Current Employment	
Desired Field	
Desired Supervisor	
Academic History	
Employment History	
Community and/or Aca	demic Society Activities

Note: 1.% Official use only.
2. Please attach Record of Academic Achievements.

## **Proof of Evaluation Fee Payment Form**

Application Number: **	
Applicant's Name:	
Desired Graduate School:	
Desired Field:	
Please paste	
Proof of Payment for Evaluation Fee	

Note: 1. \*Official Use Only

2. Please make sure the Proof of Payment is securely pasted and the date of payment is visible.

# Doctoral Program Graduate School of International Resource Sciences Akita University

# Label Slip

* Application No.
Address:
Name:
Desired Department:
E-mail address:
* Application No.
Address:
Name:
Desired Department:
E-mail address:

#### Note:

- 1. \* official use only.
- 2. Please use BLOCK LETTERS and BLACK INK