# A GUIDE

# for the TOHOKU UNIVERSITY Natural Science Direct Enrollment Education Program (DEEP) (2018-2019) - Special <u>RESEARCH</u> student

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### I. Study

### 1. Curriculum

The Tohoku University DEEP program consists of the Individual Research Training in Lab (IRTLab) course as the core course (required), and elective courses of your choice.

- > DEEP students are required to take 30 ECTS (European Credit Transfer System) Equivalent or more each semester, including the ECTS Equivalent from the IRTLab course.
- > Students who feel that they were not assigned to suitable laboratories for IRTLab should contact the Student Exchange Division as soon as possible.

### CORE COURSE (Required)

### Individual Research Training in Lab (IRTLab)

IRTLab is a course offered for short-term (semester-based) international exchange students only. Participation in the research group activities counts as 12-30 ECTS equivalent for the IRTLab course each semester. As per Table 1, ECTS Equivalents will be awarded based on "Total School Hours", after successful performance as determined by the committee in charge. IRTLab offers four categories to students, each of which has different "Total School Hours." Students are required to submit an abstract and a report containing the outcome of their IRTLab by the designated deadlines. However, this does not mean that students are required to complete a thesis by the end of the exchange term. Some parts of their research outcomes can be used for the contents of the thesis with the consent of the academic advisor at Tohoku University. In order to obtain the maximum outcome in the IRTLab course, students should discuss their results with their academic advisor and get feedback before submission. For further information, please see "2. Course Description of Individual Research Training in Lab".

### ELECTIVE COURSES

Students interested in taking elective courses should discuss the content and the course schedule etc. with their academic advisors. Detailed information on courses will be obtained from each Graduate School, as in A)-B) below (class availabilities may vary by semester and each graduate school).

- A) International Graduate Program for Advanced Science (IGPAS) in the Graduate School of Science: IGPAS offers graduate-level classes in English and the classes are open to DEEP students. <a href="http://www.sci.tohoku.ac.jp/english/igpas/">http://www.sci.tohoku.ac.jp/english/igpas/</a>
- > Master course programs:
- Graduate School of Science <a href="http://www.sci.tohoku.ac.jp/english/">http://www.sci.tohoku.ac.jp/english/</a>
- · Graduate School of Engineering <a href="http://www.eng.tohoku.ac.jp/english/academics/master.html">http://www.eng.tohoku.ac.jp/english/academics/master.html</a>
- · Graduate School of Information Sciences https://www.is.tohoku.ac.jp/en/
- · Graduate School of Life Sciences <a href="https://www.lifesci.tohoku.ac.jp/en/">https://www.lifesci.tohoku.ac.jp/en/</a>
- · Graduate School of Environmental Studies <a href="http://www.kankyo.tohoku.ac.jp/en/education.html">http://www.kankyo.tohoku.ac.jp/en/education.html</a>
- · Graduate School of Biomedical Engineering <a href="http://www.bme.tohoku.ac.jp/english/">http://www.bme.tohoku.ac.jp/english/</a>
- · Graduate School of Agricultural Science http://www.agri.tohoku.ac.jp/index.html
- Graduate School of Medicine <a href="http://www.med.tohoku.ac.jp/english/index.html">http://www.med.tohoku.ac.jp/english/index.html</a>
- Graduate School of Dentistry <a href="http://www.dent.tohoku.ac.jp/english/index.html">http://www.dent.tohoku.ac.jp/english/index.html</a>
- · Graduate School of Pharmaceutical Sciences http://www.pharm.tohoku.ac.jp/index-e.html
  - \*\*You may ask respective Academic Affairs Section of Graduate School for more details.\*\*
- B) Junior Year Program in English (JYPE): \*All courses are offered in English.

### http://www.insc.tohoku.ac.jp/english/exchange/jype/5-syllabus-elective-courses/

(JYPE program is designed for undergraduate students, however, DEEP students can also take JYPE courses.)

### 2. Course Description of Individual Research Training in Lab (IRTLab)

### The following will be required to complete the IRTLab course.

Assignments (at the last exchange term)	Date	
① Summary Research paper (A4: 30-40 pages)	Fall semester:	Spring semester:
② An abstract of the Research paper (A4: 1 page)	February 15, 2019	August 15, 2019

# IRTLab Course categories

The IRTLab course offers four categories as shown in Table 1 below.

Table 1. School hours (workload) for each category of IRTLab and ECTS Equivalents per semester

	Category Name	IRTLab 1	IRTLab 2	IRTLab 3	IRTLab 4
School hours for IRTLab	Implementation Hours (Research time)	150	240	300	420
(hours) 2. Participation Hours in laboratory activities		150	210	250	330
	Total School Hours	300	450	550	750
ECTS Equivalent	of School Hours (25 hours = 1ECTS)	12	18	22	30

### Note:

- Numbers for School Hours indicate workload (hours) per semester, 15 weeks.
- Implementation Hours for IRTLab 1 to 4 will be 2.0, 3.2, 4.0 and 5.6 hours per day on the average respectively.
- Table 1 above is provided to facilitate credit transfer between partner institutions and Tohoku University. ECTS equivalents will be awarded based on the "Total School Hours" above, after the student's successful performance as determined by the committee in charge.
- The above School Hours are minimum estimates to complete DEEP. DEEP students are also required to perform accordingly to the disciplines of each graduate school, department, and laboratory.
- While "IRTLab 4" requires full School Hours (750 hours per semester or 50 hours per week) for 30 ECTS Equivalents, students who register for category 1, 2, or 3 ("IRTLab 1", "IRTLab 2" or "IRTLab 3") must take TU courses offered to achieve 30 ECTS Equivalents in total.
- Table 2 shows total Tohoku University credit (TU credit) units from elective courses per semester necessary to complete the DEEP program, according to the student's choice of the IRT Lab course.

Table 2. Total credit units of elective courses per semester necessary for completion of DEEP

Categories of IRTLab, taken as a required course	IRTLab 1	IRTLab 2	IRTLab 3	IRTLab 4
Total credit units of elective courses per semester necessary for completion	9	6	4	0

### Students are strongly advised to take "IRTLab 4" or "IRTLab 3".

Consulting with the academic advisor for course selection (IRTLab and elective courses) is required prior to registration.

# Description of School Hours (Workload) for IRTLab

### (1) Implementation Hours

Implementation hours are spent by students working with the support of the research groups (laboratories) to which they are assigned, doing individual research on current topics closely related to their majors, as a part of a master/doctor thesis. During implementation hours, students conduct experiments, calculations, theorizations and related activities, and are expected to acquire basic research-related knowledge and techniques for doing real research. To achieve IRTLab course goals and objectives, which emphasize fundamental and high-quality research experiences, the implementation hours are set at 150-420 hours/semester in the four categories, more than 50% of the total school hours.

(2) Participation Hours in laboratory activities: Students are assigned to laboratories with consent from the faculty member in charge, and encouraged to participate in various activities at the laboratory.

#### Oral presentations:

During the participation hours in laboratory activities, students are expected to prepare for a few oral presentations, which will be required as compulsory activities. In the oral presentations, students are expected to show their understanding of basic theories in their major, to come up with solid research proposals, to analyze experimental results, and then to combine ideas and laboratory research results into creative and academically self-consistent works.

#### Seminars:

Students are required to participate in a seminar, which is an important part of laboratory activities, usually once a week for 90-120 minutes. Active participation and good preparation are needed to acquire comprehensive knowledge and to develop the ability to think analytically and critically.

#### Meetings:

Meeting with academic advisors is one of the most important aspects of the laboratory activities. Students can ask various questions, discuss with their advisors and receive suggestions, concerning their research projects. Sometimes, students may be given assignments by their advisors, which will greatly enhance their research projects. The students are supported by individual tutors in the laboratory, who will guide them greatly in research and daily life.

### Tutorials:

Tutorials conducted as laboratory activities are opportunities for discussions and group work with the tutors and other laboratory members, during which senior students often instruct juniors. Students

are encouraged to discuss the results of their research with lab mates to receive feedback, while doing the same concerning the work done by others. Through tutorials, students are motivated, and learn from each other, to be competent and responsible members of the laboratory.

### Independent study:

The independent study for laboratory activities includes completing assignments, reading relevant papers, analyzing research data and preparing to submit papers on research to the academic advisor at the end of the exchange term.

### Other laboratory activities:

These allow students to interact intellectually and culturally with other students and professors, and to acquire intercultural understanding. This allows students to form life-long friendships and future close relations.

The allotment of these participation hours in laboratory activities varies depending on the assigned laboratory, disciplines, and/or graduate school. Detailed information on the laboratory schedule will be provided by academic advisors.

\*The updated Class Schedule is obtained at each of your assigned graduate school.

### 3. Registration for Courses

- Submit your Registration form to Academic Affairs Section of assigned Graduate School by deadline accordingly. The deadline differs depending on each Graduate School.
- As to IRTLab registration, please complete the Online Registration by the following deadline. http://www.insc.tohoku.ac.jp/english/?p=20426

Fall Semester: October 15, 2018 / Spring Semester: April: 19, 2019

- ➤ The school time for one class is 90 minutes
- 2 credits are given for most of the lecture courses.
- > 1 TU credit is awarded for 45 hours of school work
- > Any course change requests are to be declined after the respective deadlines.

### 4. Grading System, Transcription, and Credit Transfer

The respective faculties will certify course credits. The academic credits earned at Tohoku University should be acceptable at students' home institutions in accordance with the student exchange agreement.

(1) Grades in the courses will be assigned as follows.

AA	90-100%
A	80-89%
В	70-79%
С	60-69%
D	Failure

(2) A copy of the academic transcript will be mailed by post to each student's home university approximately two months after the exchange period ends; April / October. Students are responsible for obtaining their credits at the home university on the basis of the transcript. Total earned TU credits can be transferred to a student's home university in accordance with its credit transfer

policies.

# 5. Certificate of Completion

A "Certificate of Completion" will be awarded to students who fulfilled with the program requirements. The certificate will be mailed by post to the student's home university with academic transcripts after the exchange period ends; April / October.

# 6. Period of Study in Exchange Programs

Program	Study Period	Program End:	
JYPE		Poster (Fall) / Oral (Spring)	
COLABS	One Semester or One Year	Oral Presentation	
DEEP		Final Class	

<sup>\*</sup>If you wish to shorten or extend the exchange period:

- Confirm with the home university for possibilities.
- Discuss with your academic advisor at Tohoku University for permission.
- Submit an official confirmation letter from home university to the Student Exchange Division by respective deadline;

May 15 (Spring) / Nov. 15 (Fall)

- Program extension for Spring-enrolled JYPE students is inapplicable.

### 7. Academic Calendar

# ◆Fall Semester (Oct. 2018 - Mar. 2019)

Orientation	Sep. 28
Classes Begin	Oct. 1
Winter Vacation	Dec. 27 - Jan. 3, 2019
Classes End	Feb. 4, 2019
Supplementary Class Period	Feb. 5 - Feb. 21, 2019
IRTLab Oral / Poster Presentation *JYPE & COLABS Only	Feb. 5, 2019
Self-Education Period	Feb. 22 - Apr. 8, 2019

### ◆Spring Semester (Apr. 2019 - Sep. 2019)

Orientation	Apr. 4
Classes Begin	Apr. 8
University Foundation Memorial Day	June 22
IRTLab Oral / Poster Presentation *JYPE & COLABS Only	Aug. 6-7 (COLABS), Aug. 7-8 (JYPE)
Classes End	Aug. 8

### II. JASSO (Japan Student Services Organization) Scholarship

- (1) All JASSO scholars are required to attend the "JASSO Scholarship Guidance".
- (2) JASSO Scholarship procedures are as follows:
  - A monthly stipend of 80,000 yen will be transferred to the student's bank account around the end

of every month. (Except April and October. The payment for April will be made around the end of May. The payment for October will be made in November)

- JASSO scholars **must sign the confirmation form** at the Student Exchange Division during the signing period every month.
- JASSO scholars will be disqualified from receiving the stipend of the month if they missed the signing period regardless of the reason.
- Contact the Student Exchange Division for any questions regarding the JASSO scholarship.

### (3) Period of Scholarship

The scholarship period is as follows:

Period of Stay	From:	To:	
Fall semester only	Ostobou	January	
Fall and Spring semester	October	July	
Spring semester only	A	July	
Spring and Fall semester	April	January	

<sup>\*</sup> JASSO scholars, in principle, cannot change their scholarship period. \*

### (4) Requirements to receive the scholarship

There are several tasks that must be performed to receive the JASSO scholarship. Students are required to fill in and submit the designated forms by the end of the scholarship period. The designated forms will be sent by the Student Exchange Division.

# III. Insurance

All exchange students are required to join the following types of insurance.

- 1. National Health Insurance
- 2. Personal Accident Insurance for Students Pursuing Education and Research ("GAKKENSAI")
- 3. Comprehensive Insurance for Students Lives Coupled with PAS "GAKKENSAI" for International Students ("Inbound futai-gakuso")

### IV. Important Notices

#### > Dormitory

Students must follow the rules of the university dormitories during their stay, as per the instructions given at the orientation of each dormitory when they arrive. Students are not allowed to let friends and/or family members stay overnight in their rooms. Please avoid making any troubles and keep up good relations with other residents.

\*Tohoku University will report to home university once we found out that students are behind the rent. Students are obliged to return home during the program if no payments were confirmed right after the remind notice by Tohoku University.\*

#### > Driving cars and motorcycles

It is not recommended that students drive cars or motorcycles even if they have driving licenses. Please note that students must show proof that they have parking spaces in Sendai and insurance to own cars. If you decide to own a car or a motorcycle anyway, please submit the registration number of the car or motorcycle, a copy of your valid driving license, a letter of consent for driving written by academic advisor, as well as a copy of your car or motorcycle liability insurance policy covering accidents, to the Student Exchange Division in advance.

#### > Mobile phones

For those who would like to subscribe with a mobile carrier, it is important to understand and agree to all terms of the contract beforehand. It is the responsibility of the student to make the necessary payments.

### > Adherence to Japanese Law

Students are to adhere to Japanese Law during their stay in Japan. Do not violate the law, or you will be punished under the jurisdiction of Japan.

### > Health and Safety

Staying healthy and safe is the most important thing for making the most of life at Tohoku University. Refer to information of the Student Health Care Center and counseling services and local medical facilities if you are feeling unwell.

### > Counseling and Disability Services

These free services are available if you encounter difficulties and/or feel anxious during the program. The details of student problems will be kept strictly confidential. (Consultations are held in English.) You may contact them by e-mail or visit the center directly.

### V. Other

#### > Admission Discount for International Students

Free or discounted admission can be made for international students at public facilities such as museums, parks, and gardens in Sendai. Show your student ID and residence card at the entrance.

### > University Library

Students are required to present their admission cards to use the University Library. Admission cards for JYPE and COLABS students will be handed at the program orientation. For DEEP, students will receive one from each assigned Graduate School/Graduate School as soon as it is issued.

#### > Events Intended for International Students

Several excursions and events are scheduled for international students. The Student Exchange Section will announce details of the activities as needed. Students are encouraged to participate.

### VI. Contact information

[Chair of the Yoshitaka KASUKABE, Ph.D. Professor

Program] Global Learning Center

yoshitaka.kasukabe.c3@tohoku.ac.jp

TEL: +81-(0)22-795-7978 / FAX: +81-(0)22-795-7978

[General Issues]

Incoming Student Exchange Section, Student Exchange Division

studyab@grp.tohoku.ac.jp

TEL: +81-(0)22-795-3775 / FAX: +81-(0)22-795-7826

[Useful Link]

- Tohoku University Information for Incoming Exchange Students
- Tohoku University International Support Office
- <u>Student Health Care Center and counseling services</u>
- The Counseling Office
- Disability Services Office
- Medical institutions outside the campuses