



# Joint Master Program between North-Eastern Federal University and Hokkaido University

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# **Background - RJE3 Program**

# Inter-University Exchange Project (funded by Japan's Ministry of Education)

A project supporting international collaborative efforts in education that would help Japanese students to study overseas and international students study in Japan, with the quality assurance of higher education, aiming to develop human resources capable of engaging in global activities and increasing the global impact of Japan's university education.

In Fiscal year 2014 (Target country: Russia and India)

Russia ⇒ 5 projects adopted

Funding term: 5 years (2014.4 – 2019.3)



# Hokkaido University

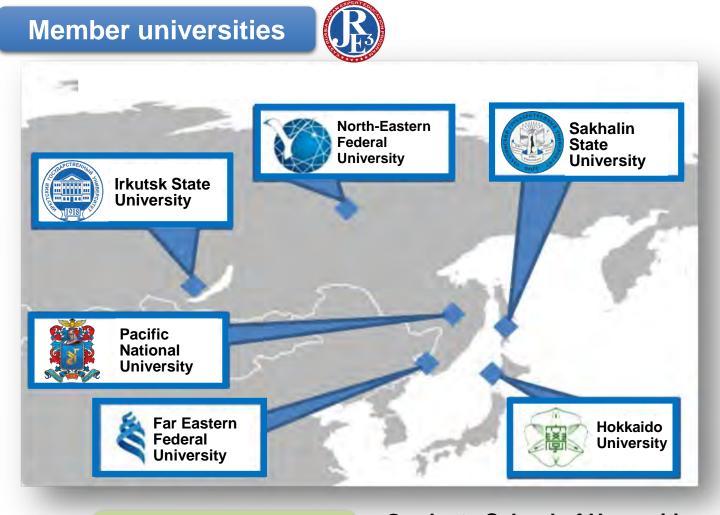
# RJE3: East Russia Japan Expert Education Program

Purpose: To produce <u>experts</u> capable of playing leading roles in <u>environmental sustainability</u>, <u>culture and</u> <u>development in the Far East and the Arctic Circle</u> (1) environmental sustainability

Highly skilled workers with multicultural understanding, as well as communication, planning/creative and leadership abilities

- (1) environmental assessment
- (2) cultural diversity
- (3) soil and productivity
- (4) regional resource development
- (5) disaster prevention management

# RJE3 Program (East Russia Japan Expert Education Program) -1



305 students exchanged for 6 years 2014-2019

156 Japanese students

149 Russian students

2019-RJE3 Program is being operated using the budget of member universities.

Five Departments of Hokkaido University

- Graduate School of Humanities and Human Sciences
- Graduate School of Science
- Graduate School of Engineering
- Graduate School of Agriculture
- Graduate School of Environmental Sciences

interdisciplinary

## **Each country's Needs:**

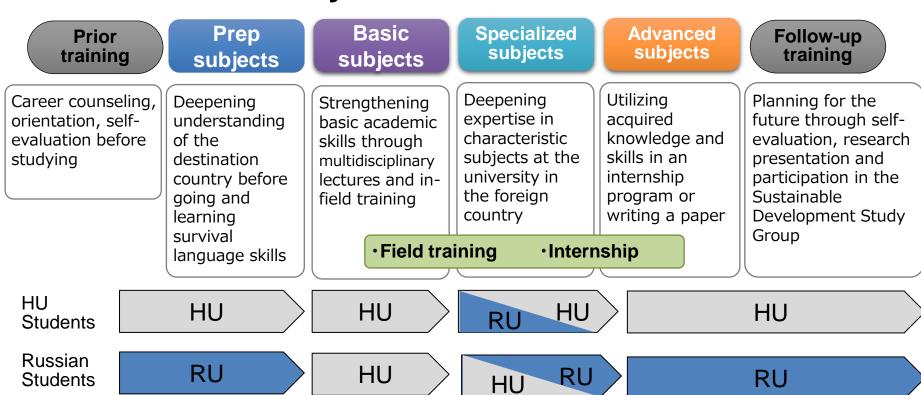
#### Hokkaido University (Japan):

- Field training
- Multicultural/cross-cultural experience
- Employment oriented

#### Russian universities:

- Experience of cutting-edge research
- Subject study in English
- Deepening understanding of Japan

### **RJE3 Educational system:**



#### Basic subjects (offered by Hokkaido University)

RJE3 Introduction: Environment, Culture and Sustainable Development in Far East and Arctic Region

History, Art, and Culture of Russia

Seminar on Siberian Studies: History, Environment, living condition in cold region and Economics

RJE3 Special Seminar I: Energy Security in Cold Climate Region

# Yakutsk Field Short Course: Permafrost Ecosystem in the Arctic Regions

RJE3 Special Seminar I: Rebun International Anthropological Field School

RJE3 Special Seminar I: Fieldwork on Development Technologies in Cold Region

RJE3 Special Seminar I: Past and Present of Hokkaido: History of Ishikari and Sorachi

Design School of Japan and Russia

# Yakutsk Field Short Course: Permafrost Ecosystem

#### Instructor

**★ Atsuko SUGIMOTO (Arctic Research Center)** 

Tomonori SATO (Faculty of Environmental Earth Science) Shunji KANIE (Faculty of Engineering)

Trofim MAXIMOV (North-Eastern Federal University)



#### **Course Goals**

- 1) To understand nature of permafrost ecosystem and people who live in it in Russian subarctic region.
- 2) To obtain basic knowledge to think about future effects of environmental changes such as global worming and associated extreme events on the ecosystem and lives of people.

#### **Course Content**

- 1) Lectures and field course was conducted **at Spasskaya Pad forest station near Yakutsk**, jointly with staff members from North-Eastern Federal University and Institute for Biological Problems of Cryolithozone.
- 2) Students are divided into four groups, and each group conducts mini-research project on topics such as permafrost, forest vegetation, and CO2, which can be affected on global climate.
- 3) Lectures were given by staff members from Hokkaido University and North-Eastern Federal University etc.



## Agreement on network form between NEFU and HU -1

- Collaborative research/education between NEFU and HU
- Joint educational program under the RJE3 program



#### NEFU and HU started the "Joint Master Program" in network form in 2018.

- Agreement on the network form of the implementation of educational program between two institutions:
  - Institute of Natural Sciences, North-Eastern Federal University
  - Graduate School of Environmental Science, Hokkaido University

What is <u>Network form</u>?: <u>Network form</u> provides an opportunity to master an educational program and/or separate academic subjects, courses, disciplines(modules), practices, and other components provided educational programmes, <u>using resources of certain organizations</u>, conducting educational activities, including foreign organizations, and if necessary, using the resources of other organizations.

(From the order of the Ministry of Science and Higher Education and the Ministry of Education dated on Sep 14, 2020, "Procedure of organization and accomplishment of educational activities at implementation of educational programmes in network form)

## Agreement on network form between NEFU and HU -2

#### ◆ Composition of the Agreement:

- Article 1 Subject of the Agreement
- Article 2 Management of the Joint Master Program
- Article 3 Status of students
- Article 4 Financial support for the implementation of the educational program
- Article 5 Conditions and procedures for the implementation of educational activities when implementing the educational program

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Annex 1 educational resources (implementation schedule, course list, scope, etc.)
Annex 2 correspondence of the number of credit units and evaluation system

**Annex 3 list of lecturers** 

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- Article 6 Obligations of the Parties
- Article 7 Term of Agreement
- Article 8 Responsibility of the Parties
- Article 9 Procedure for changing and terminating the Agreement
- Article 10 Requisites and signatures of the Parties

#### ✓ Status of students [Article 3]

- Number of exchanged students: up to 5 students/year at each institution
- The period of enrollment at the receiving institution: up to one year
- Participating students are required to have proficiency in English
- For the completion of Master Thesis, <u>supervision from both institutions is</u> <u>given importance</u>
- Upon completion of the educational program at the partner institution, the students are given an academic certificate in the form specified by the receiving party, which the sending party recognizes as a document for re-enrolling the learning module.

#### √ Financial support [Article 4]

- Entrance examination, admission and tuition fees are waived at the receiving party.

#### ✓ Conditions and procedure [Article 5]

- Annex 1-3 >> Next slides
- Training can be conducted in Russian or English at NEFU, and in English or Japanese at HU
- Joint educational program can be implemented <u>using distance educational/</u> <u>e-learning technologies</u>

Learning Process for NEFU students under the Joint Master Program [Annex 1]

	First Yo	First Year (Sep -Aug)		Second Year (Sep-Aug)				
Semester	1 <sup>st</sup> Sep-Jan	2 <sup>nd</sup> Feb-Jul		ep oint con	3 <sup>rd</sup> Oct-Feb nmission us system (rer			
NEFU's students	Study at NEFU	Study at NEFU	Joint fi study a NEFU a Summe School	t <b>(</b> and er	Study at HU	Study at NEFU	res pra	edits for search work, actical training,
< Study at HU >						a thesis		

Course Name (offered in the 3 <sup>rd</sup> semester by <u>HU</u> )	(Credits at <u>HU</u> )	Credits at NEFU	Competence's codes
Laboratory processing of collected field- work materials			
Advanced Course in Climate Change Impacts	2	3	GPC-6, PC-1
Advance Course of International Science Communication Methods	2	3	GPC-3,4

Adjustment based on Syllabus, course schedule & instruction, student's report, etc.

Correspondence of Evaluation System [Annex 2]

Assessment system at NEFU			
Evaluation	Points		
A: Excellent	100-95		
B: Perfect	94.9-85		
C: Very Good D: Good	84.9-75 74.9-65		
E: Satisfactory	64.9-55		
FX: Unsatisfactory F: Very poor	54.9-25 24.9-0		

Assessment system at HU				
Evaluation	Points			
S: Excellent	100-90			
A: Very good	89-80			
B: Good	79-70			
C: Pass	69-60			
F: Failed	59-0			

- Once NEFU students get the credits and evaluation of the courses offered by HU, they are not required to take exam for credits of the courses at NEFU.
- ➤ Titles of completed courses at HU under the Joint Master Program will be shown in the diploma issued by NEFU.

#### **Number of participating students:**

	2018	2019	2020	*In each year, 2 HU
NEFU students	4	5	6	students joined "Yakutsk Field Short Course" and
HU students	0*	0*	0	did field research at Yakutsk for Master's Thesis

# <u>Program Implementation during the COVID-19 pandemic:</u> Joint courses offered by NEFU and HU:

Introduction to Circumpolar North (Started in 2019)

2019: online (via Polycom)

2020: hybrid (simulcast classes via Zoom&Webex and on-demand classes)

Yakutsk Field Short Course: Permafrost Ecosystem Originally scheduled in Summer 2020 (at Yakutsk)

⇒ rescheduled to in February —March <u>via Online</u>

\*Other courses in the RJE3 Program and the Graduate School of Environmental Science will be offered via online.

Joint educational program will be implemented using distance educational/ e-learning technologies.