2026 ArCS III Saroma Sea Ice School

Program Guidelines

1. Overview and Objectives

As part of the career development initiatives of the Arctic Challenge for Sustainability III (ArCS III), a project supported by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan, this field training program will be conducted at Lake Saroma, located along the coast of the Sea of Okhotsk in Hokkaido, Japan.

Through hands-on activities on lake ice, sample processing and analysis, data analysis, and final presentations, participants will learn about the biogeochemical and physical properties of snow, sea ice, and the ocean, as well as their relationships with marine ecosystems.

The program provides practical learning opportunities and hands-on experience for students interested in conducting research in the Arctic and other polar regions. It aims to lay the foundation for participants to pursue independent research in the future.

2. Eligibility

Applicants must be enrolled in a master's or doctoral program at a national, public, or private university in Japan at both the time of application and the time of participation. They must be conducting, or intend to conduct, research related to the Arctic or other polar regions.

Applicants from all academic disciplines, including the humanities and sciences, are welcome.

Approximately 5–8 students are expected to participate. The final number will be determined based on the number of applications, the available budget, and necessary expenses.

Note: This program will be conducted jointly with the following field training courses:

- The Hokkaido University's Inter-Graduate School Classes *Arctic and Antarctic Studies* (for Hokkaido University graduate students).
- A field course in the field of marine science offered through Hokkaido University's Uehiro Oceanography program (for students of Hokkaido University's Faculty of Fisheries Sciences and the University of Hawai'i).

Hokkaido University graduate students who wish to earn academic credit through the Inter-Graduate School Classes *Arctic and Antarctic Studies* are **not eligible to apply for this program through the present application process**. Separate application announcements will be issued for the two courses listed above.

3. Principal Instructor

Daiki Nomura, Professor, Faculty of Fisheries Sciences, Hokkaido University

4. Venue

Napal Kitami — Hokkaido Youth Experience and Activity Support Center

365-1 Tokoro-cho, Kitami, Hokkaido 093-0216, Japan

Tel: +81-152-54-2584

Website: https://napal-kitami-hokkaido.jp

Accommodation will be in shared rooms separated by gender, with shared gender-separated toilets and bathing facilities.

Three meals per day will be provided at the facility's dining hall. Dietary accommodations for

food allergies, vegetarian diets, and vegan diets are available upon request and subject to consultation.

5. Program Dates
Monday, February 22 – Sunday, February 28, 2027

Schedule

- **February 22:** Participants must arrive at Napal Kitami by 6:00 p.m. An orientation session will be held in the evening.
- **February 23–27:** On-ice field training, lectures, and other activities. Final presentations will take place on the afternoon of February 27.
- **February 28:** Departure from the venue in the morning.

6. Program Activities
The program aims to help participants understand the biogeochemical and physical properties of snow, sea ice, and the ocean, and their relationships with marine ecosystems.
Activities will include on-ice fieldwork, such as collecting sea-ice cores, snow, and seawater from beneath the ice, and collecting data using scientific instruments. Participants will also attend indoor lectures and process and analyze collected samples, including measuring salinity, observing ice algae under a microscope, and preparing thin sections of sea ice. Additional activities will include analyzing data obtained from scientific instruments and presenting findings at a final presentation session.
The program is also expected to provide opportunities to observe fieldwork conducted by researchers from Japan and abroad who visit Lake Saroma for research purposes, and to learn about their research.

7. Language
English
Supplementary explanations in Japanese will be provided as needed.

8. Financial Support from ArCS III
ArCS III will provide financial support for the following expenses:

1. **Transportation:** Public transportation costs between the participant's home and Napal Kitami.
2. **Accommodation:** Lodging at Napal Kitami during the program.
3. **Meals:** Meals provided at Napal Kitami during the program.

Note: ArCS III will generally cover travel expenses between the participants home and Napal Kitami on February 22 and February 28, in accordance with the applicable travel regulations. Expenses for social gatherings, tea, snacks, and similar items must be covered by participants themselves.

9. Application and Selection
Application Schedule

- **November 30, 2026:** Application deadline
- **Late December 2026:** Notification of selection results
- **Early January 2027:** Online orientation session

Required Documents

1. Application form (using the designated format and including the specified information).
2. A copy of the student's university ID card.
3. Documentation confirming enrollment in the Personal Accident Insurance for Students Pursuing Education and Research (Gakkensai) and the Liability Insurance coupled with Gakkensai (Gakkenbaiseki), such as copies of receipts or certificates.

Submission Instructions

The deadline for submission is **5:00 p.m. on Monday, November 30, 2026 (Japan Standard Time)**. Please submit all three documents listed above as email attachments to the Lake Saroma On-Ice Field Training Program coordinator at Hokkaido University's Hakodate Campus:

Email: daiki.nomura@fish.hokudai.ac.jp
If you do not receive an acknowledgment of receipt from the coordinator within a few days of submitting your application, please follow up by email.

Selection Process

Applications will be evaluated based on the following criteria:

- **Relevance:** The extent to which the applicant's academic background, research topic, and experience relate to the content and objectives of the program.
- **Future potential:** The extent to which participation in the program is expected to benefit the applicant's future academic and research activities.
- **Ability and motivation:** The applicant's ability to participate effectively in the program and their motivation to take part.

Selection will generally be based on document screening. However, online interviews may be conducted if deemed necessary.

Withdrawal from the Program

As a general rule, withdrawal is not permitted after acceptance has been officially notified. Applicants should check and make arrangements for any other important commitments, such as examinations, entrance examinations, and job-hunting activities, before applying.
If circumstances such as illness or injury prevent an applicant from participating after they have applied, they must notify the program coordinator as soon as possible.

Requirements After Completion of the Program

Participants will be required to:

- Submit a report reflecting on what they learned and experienced during the program.
- Present their activities if a special session of this educational program is held.
- Cooperate with outreach activities, including contributions to websites and public events.

10. Items Participants Must Bring

A detailed explanation of required items will be provided during the online orientation in January.

1. **Cold-weather clothing:** Outerwear, base and mid-layers, a knit hat, sunglasses, gloves, socks, insulated winter boots, and other appropriate clothing. A limited number of used items may be available to borrow; please inquire in advance.
2. **A laptop computer** for data analysis and presentations.

3. **Personal toiletries and daily necessities**, including shampoo, towels, and laundry detergent.

11. Contact Information

ArCS III Saroma Sea Ice School Program Coordinator (Daiki Nomura)
Hakodate Campus, Hokkaido University
3-1-1 Minato-cho, Hakodate, Hokkaido 041-8611, Japan
Tel: +81-138-40-8849
Email: daiki.nomura@fish.hokudai.ac.jp

12. Additional Information

Examples of previous field training activities and research conducted at Lake Saroma can be found at the links below.
Please note that the scale and format of the activities vary from year to year. These materials are provided for reference only.

- Sea Ice School 2026
- Additional reference materials (Google Drive)