



International Winter School for Graduate Students, Harbin Institute of Technology, 2026

Environmental Risks and Climate Change in the Arctic Region of Asia-Europe

January 12-21, 2026



GENERAL INFORMATION

The Arctic ecosystem is fragile, and any excessive development and destruction will exert severe and far-reaching impacts on the global climate and ecosystems. The Eurasian Arctic region is one of the areas most significantly affected by climate change. Its ecological and environmental risks primarily include permafrost thawing and carbon cycle crises, sea ice loss and ecosystem restructuring, ocean acidification and intensified pollution, as well as changes in terrestrial hydrology and vegetation. This constitutes a global issue exacerbated by climate warming, characterized by rapidity, interconnectedness, and global reach. It essentially consists in the concentration and amplification of global pollutants in the fragile Arctic environment.

Through coursework and practical activities, participants will gain an understanding of the pollution status of emerging contaminants in various environmental media of the Eurasian Arctic-amid climate change, as well as how these contaminants respond to climate change in the region. They will also gain insights into the impacts of climate change on carbon emissions from Arctic permafrost and the feedback effects of carbon emissions on climate change, while being exposed to the academic frontiers of Arctic environmental and ecological research. The winter school provides participants with the opportunity to engage in academic exchanges with experts in the field of Arctic ecological environment from both China and abroad, and to forge academic links with peers worldwide.

ATTENDANCE REQUIREMENTS

This Winter School invites master's and doctoral students from universities worldwide who love and care about the Arctic and intend to acquire relevant scientific knowledge of the Arctic. This program is open to graduate students of all academic backgrounds. The student should be motivated to enhance understanding and friendship among students from different countries. Applicants must possess sufficient proficiency in English (both oral and written) to engage in academic activities.

LECTURES AND SEMINARS (Tentative)

The winter school will feature one core course and six academic seminars in English. We have invited distinguished experts and scholars from top institutions in Russia, Norway, Canada, and China, including North-Eastern Federal University, Norwegian University of Life Sciences, and Harbin Institute of Technology.

Topic (preliminary)	Duration (50 min/unit)
Pollution of the Arctic ecological environment	16 (course)
Frost Resistant Elastomeric Materials for Northern Climate	4(seminar)
Regional climate dynamics in observations, satellite data and hydrodynamic modelling	2(seminar)
Global climate models in scenario-based future climate projections	2(seminar)
Trend Analysis of Landscape Changes in Yakutia Based on Remote Sensing	2(seminar)
Bioclimatic modeling of Yakutia Using Regionally Adapted Ensemble of Global Climate Models	2(seminar)

GROUP RESEARCH PROJECT

Participants will be divided into several groups of five members each. Each group will collaborate on a research project focused on one of the following themes: Carbon emissions and the carbon cycle under climate change in cold regions, Arctic air pollution, Arctic water pollution, Arctic ecosystem change. Each group is expected to conduct research, analyze findings, and deliver a final presentation as a team.

PROGRAM DATES AND TIMES

Date	Morning	Afternoon	Evening
Jan 12	Opening Ceremony, Meet & Greet	Campus History & Aerospace Museum Tour	Ice-breaking Session
Jan 13	core course	Seminar & Group Discussion	Free Time
1月14日 Jan 14	core course	Seminar	Free Time
Jan 15	core course	Seminar	Chinese Food Experience
Jan 16	core course	Group Project Work	Free Time
Jan 17	Ecological Field Trip	Free Time	Free Time
Jan 18	Free Time		Free Time
Jan 19	Seminar & Group Discussion	Group Project Work	Free Time
Jan 20	Corporate Visit	Group Project Presentations	Graduation Party
Jan 21	Departure Arrangements		

CONTACT INFORMATION

Registration Deadline: January 8th, 2026. Please note that the program schedule is subject to change based on actual circumstances. For further inquiries, please contact: IAS_HIT@163.com. Registration can also be done by scanning the QR code to join a WeChat group. The group QR code is shown below.



Accommodation and meal subsidies will be provided for participants of this winter school. Detailed standards will be communicated within the registration WeChat group.