

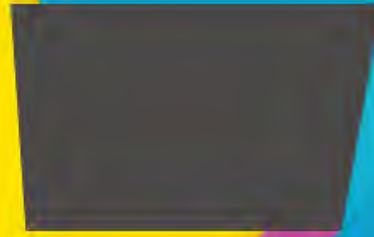


Summer School at
**HOKKAIDO
UNIVERSITY**

2023

**Hokkaido, Japan
June-October**

This summer,
... ..



**HOKKAIDO
SUMMER
INSTITUTE**



Advanced Research Course **p6**

		p6
		p6
		p9
		p10
		p11

Global Liberal Arts Course **p11**

		11
		p12
		p12
		p13
		p13
		14
	—	p15

HSI Extension / Professional Program **p16**

		p16
		17



HSI offers a variety of programs that take advantage of the unique features of Hokkaido University. We look forward to your participation in the refreshing summer in Hokkaido.

Hokkaido Summer Institute (HSI), one of the largest summer schools in Japan, is a program that brings together world-leading researchers with proven educational and research records, and provides educational courses in cooperation with the Hokkaido University (HU) faculty members. In 2022, more than 160 researchers from all over the world gathered at HU.

The medium of instruction at HSI is English. This provides international students with a stress-free learning environment without having to worry about language barriers, and also creates a special opportunity for Japanese students, who can participate in classes taught by internationally acclaimed researchers.

HSI also allows its participants to expand their knowledge of subjects in world-class research fields of HU which used to be open only to HU students. Program participants have an opportunity to attend classes by attractive educational techniques such as field training using Hokkaido's extensive land, and active learning to develop human resources capable of thriving on the world stage.

HU has high expectations that the HSI students cultivate a better understanding of other cultures and improve communication skills through exchanges with researchers and students from other countries. Social events are planned and held by an official HU student volunteer group throughout the program.





About Hokkaido University

Founded in 1876, Hokkaido University is one of the oldest, largest, and most prestigious universities in Japan.

The university has 12 undergraduate schools and 21 graduate schools, covering almost all area of the humanities and social and natural sciences. Furthermore, we are one of the leading institutions for research activities in Japan and worldwide. We offer a comprehensive educational experience, world-class research facilities, and all the attractions of living in the cosmopolitan city of Sapporo. Our campus is located in a breath-takingly beautiful setting. Green spaces are spread throughout the campus, offering warm and welcoming atmosphere.

Sapporo Life

Sapporo is the 5th most populated city in Japan with a population of 1.9 million. Even though it is a big city, Sapporo is surrounded by a beautiful natural environment that makes one forget that you are in an urban setting. Sapporo strength is not only its beauty, but also its safety, delicious and fresh foods, and its comfortable climate. During the Hokkaido Summer Institute program, numerous cultural events will be held—such as the YOSAKOI Soran Dance Festival, the Annual Hokkaido Shrine Festival, and Pacific Music Festival—and we know that participants will make the most of their time with us at HU; and of course, they can enjoy stunning views of nature by traveling a short distance to our surrounding towns to get a complete Hokkaido experience.



Courses



The courses offered at HSI 2023 are in accordance with the 17 Sustainable Development Goals (SDGs).

10courses 7courses 85courses 117courses 15courses

6courses 53courses 39courses 123courses 48courses

35courses 49courses 52courses 57courses 58courses

27courses 56courses

Create your own program by combining courses.

Eligibility



U de.g,ad a e Le e

Degree-program students at universities (Currently enrolled students) or high school graduates (Non-students)

G,ad a e Le e

Degree-program students at graduate school (Currently enrolled students) or university graduates (Non-students)

Credit & Digital Badge

Credits or digital badge will be awarded upon completion of each course except for certain courses.

Fees

Program fee: From **14,800** per course

Program fee will be waived for students from HU and HU's partner institutions under certain conditions.

Separate fees apply for Non-students applicants. Please refer to HSI website for details.

Accommodation

Please refer to listings for off-campus accommodation facilities on HSI website.

We will arrange off-campus accommodation for participants who applied during application period in March.

*There are a limited number of rooms available.



This course offers cutting-edge classes in specific areas of expertise. As lecturers include many researchers from overseas universities and other institutions, their lectures include content that can only be studied at HSI. The lecturers also include researchers in Japan at the forefront of their fields.

International Archaeological Field School in Rebun Island
(for Undergraduate student)



Philosophy (Lecture): Topics in Modal Logic 2023

International Archaeological Field School in Rebun Island
(for Graduate student)



Mathematics and Material Science: Mathematics, Physics, Earth & Planetary science, Chemistry, Nano micro science

Undergraduate Ligand design in group 13 and f-element mediated chemical transformation



Chirality and Chemical Biology



Leading and Advanced Biological and Polymer Chemistry and Engineering IIIA (Introduction to Basic Biological Chemistry)



Leading and Advanced Biological and Polymer Chemistry and Engineering IIIB (Modern Trends in Organic Chemistry and Biological Chemistry)



Leading and Advanced Molecular Chemistry and Engineering II (Frontier of Nanocomposite Materials for Photo-Energy Conversion)



Leading and Advanced Materials Chemistry and Engineering IIIA (Solid State Chemistry of Transition Metal Compounds)



Leading and Advanced Materials Chemistry and Engineering IIIB (Instrumentation Chemistry)



Leading and Advanced Molecular Chemistry and Engineering IA (Frontier of Biophysical Analysis of Biomolecules)



Leading and Advanced Molecular Chemistry and Engineering IB (Principles of Catalytic Chemistry: Theory and Application)



Leading and Advanced Molecular Chemistry and Engineering IIA (Frontier of Nanocomposite Materials for Photo-Energy Conversion)



Leading and Advanced Molecular Chemistry and Engineering IIB (Advanced Organic Chemistry)



Leading and Advanced Molecular Chemistry and Engineering IIIA (Modern Trends in Physical and Material Chemistry)



Applied Nanomaterial Science



Basic Nanomaterial Science



Space policy and space agency management

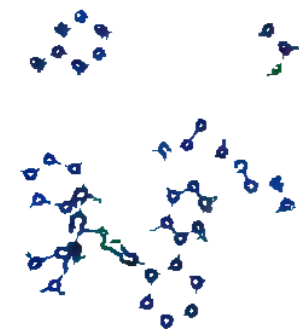


Design of Spaceflight Vehicles



Design, fabrication and operation of micro - and nano-satellites





Advanced Energy Structure Materials 1 - Microstructure analysis,
2 - Mechanical property



Leading and Advanced Materials Chemistry and Engineering IA
(Informatics for Chemistry and Materials Science I - Basic
Concepts and Quick Course of Python)



Leading and Advanced Materials Chemistry and Engineering IB
(Informatics for Chemistry and Materials Science II - Data-Driven
Materials Design and Genomics)



Leading and Advanced Materials Chemistry and Engineering IIIC
(Functional Solid State Materials Chemistry)



Leading and Advanced Molecular Chemistry and Engineering IIIB
(Separation Process Engineering I)



Leading and Advanced Molecular Chemistry and Engineering IIIC
(Separation Process Engineering II)



Leading and Advanced Molecular Chemistry and Engineering IIID
(Chemical Engineering Thermodynamics)



Advanced Combustion



Elasticity



Advanced Quantum Beam Materials



Sediment Transport



Application of Thermal Engineering to Renewable Energy
Utilization and Zero Energy Buildings

Leading and Advanced Biological and Polymer Chemistry and
Engineering IIA (Basics of biocatalysts toward the realization of
carbon neutral society)



Leading and Advanced Biological and Polymer Chemistry and
Engineering II (Organic Polymer Materials and Devices)



Advanced Seminar in Applied Veterinary Medicine:
Wildlife Medicine I (Zoo Science)

Advanced Seminar in Applied Veterinary Medicine:
Wildlife Medicine II (Conservation and management of wildlife)

Advanced Seminar in Applied Veterinary Medicine:
Wildlife Medicine III (Conservation of marine mammals)

Special Lecture in Protein Science
(Soft Matter Structural Analysis 2023)



Life science special lecture III
(Practical bioimaging workshop for life sciences)



Life Science Special Lecture III
(Advanced Fluorescence Microscopy in Life Science Research)



Introduction to Japanese Law

Building Structures and Seismic Resistant Technologies

Introduction to SDGs: Sustainable Infrastructure in India and Japan (OGGs-STSI)



Animal induced iyashi and wellbeing in tourism, recreation and hospitality



Mathematics and Material Science:
Integrated Engineering, Nano Micro Science

Sustainable Nanomaterials Science and Technology



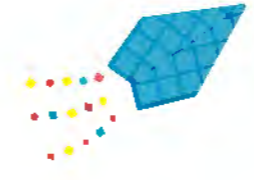
Inter-Disciplinary Sciences: International Communication, Linguistics, Career Formation, Career Development, Human Life Science, Health & Sports Science, Science Education				
Undergraduate	Social Ecology: Principles of Invasion Ecology 2023			OK
	Connecting Asia for a Sustainable Future – Summer School in Thailand, Hongkong and Japan 1		—	—
	Connecting Asia for a Sustainable Future – Summer School in Thailand, Hongkong and Japan 2		—	—
	Introduction to the International SDGs			OK
	HU-Niseko SDGs Summer School			OK
	Fundamental learning of Indian language and culture (STSI)		—	—
	Special Workshop for Bio/Healthcare Business			OK
Master	Effect of IAQ on Elderly Health			OK
Graduate	Environmental Health and Sustainable Development Goals I			OK
	Environmental Health and Sustainable Development Goals II			OK
	Introduction to SDGs: Populations-Activities-Resources-Environments Chain in Asian Countries and Japan (OGGs-PARE)		—	—
	Introduction to SDGs: Environment, Culture, and Sustainable Development in Northern Region and Japan (OGGs-NJE3)		—	—
	SDGs Internship/Field study: Summer School in Japan (OGGs-PARE)		—	—
	SDGs Internship/Field study: Design School in Northern Region (OGGs-NJE3)		—	—
	SDGs Internship/Field study: Past and Present of Hokkaido -History of Ishikari and Sorachi- (OGGs-NJE3)		—	—
	International Colearning PBL for Problem Solving (Object Theater) (OGGs)		—	—
	International Colearning PBL for Problem Solving (Presentation) (OGGs)		—	—



Graduate	Introduction to SDGs: Awareness of Glocal Issues and International Collaboration (OGGs)		—	—
	Imagine the Future of Sapporo Through Art I			OK
	Current Status and Prospects of Space-Based Commercial Activities			OK
	Special Lecture on Drug Discovery Science II (Bio-Healthcare Entrepreneurship Workshop)			OK

Japanese Language/Culture

Undergraduate	Fundamental learning of Japanese language and culture (STSI) online classes		—	—
	Fundamental learning of Japanese language and culture (STSI) in-person classes		—	—
	Pre-Intermediate Japanese Grammar			OK
	Introductory Japanese Grammar 1A (face-to-face)			OK
	Introductory Japanese Grammar 1B (face-to-face and online)			OK
	Introductory Japanese Grammar 2A			OK
	Introductory Japanese Grammar 2B			OK
	Introductory Japanese Grammar 2C			OK
	Introductory Japanese Grammar 3			OK
	Introductory Japanese Grammar 4A			OK
	Introductory Japanese Grammar 4B			OK
	Japan in the Global Political Economy			OK
	Political Economy of Japan			OK
	HSI Introduction to Japanese Society		—	—





HSI Extension / Professional Program in English



Course Format Adults

Economics, Pedagogy

Graduate Methodology and Philosophy of Contemporary Economics



Teaching Tourism



Physics, Medical Science, Dentistry, Environmental Conservation

Graduate Physics in Open Systems: Fundamentals



Physics in Open Systems: Advanced



Physics of Disordered Quantum Systems : Maby-boddy Interactions



Applied physics to explore the anatomy and pathology of the brain



Hands-on Machine Learning with Python, TensorFlow and Keras



AAA Adhesion/Anti-cariious/Active-bio materials: basic



AAA Adhesion/Anti-cariious/Active-bio materials: advanced



HSI Extension / Professional Program in Japanese

Law, History

Undergraduate Let's Learn Japanese Law in Japanese Language



Inazo Nitobe and His Time



Environmental Conservation, Inter-Disciplinary Sciences, Veterinary Science

Undergraduate HSI original brush up program - Carbon neutral



HSI original brush up program -SDGs from "women's perspective" I



HSI original brush up program -SDGs from "women's perspective" II



Graduate Learning Veterinary Forensics : Animal Poisoning and Analysis I



Learning Veterinary Forensics : Animal Poisoning and Analysis II

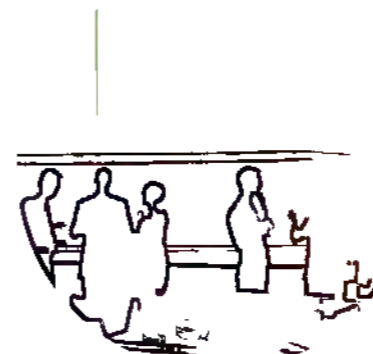


Career Development, Science Education

Graduate Innovation, Entrepreneurship, and Finance - How can we double Japan's GDP per capita to that of Singapore within 10 years?



Imagine the Future of Sapporo Through Art 2



as of December 2022

Please refer to the website for detailed and updated course information.

<https://hokkaidosummerinstitute.oia.hokudai.ac.jp/en/>



 <https://hokkaidosummerinstitute.oia.hokudai.ac.jp/en/>

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