



**UNESCO Chair on Water, Energy and Disaster Management  
for Sustainable Development  
(WENDI)**

***Higher Education and Research for Sustainable Development  
(HESD) Programme***

**Guideline of Registration  
for the Academic Year 2025**

**2025 年度  
ユネスコチェア WENDI-HESD プログラム  
登録要覧**

**UNESCO Chair on Water, Energy and Disaster Management  
for Sustainable Development (WENDI)  
Kyoto University**

京都大学  
水・エネルギー・災害研究教育ユネスコチェア

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# 1. WENDI-HESD Programme – Policy and Outline

## 1.1 Policies of UNESCO Chair WENDI

The objective of the UNESCO Chair on Water, Energy and Disaster Management for Sustainable Development, Kyoto University (WENDI) is to equip students with knowledge, superior skills and broad perspectives to address the many challenges that today's societies face. WENDI thus offers a novel and interdisciplinary Higher Education and Research for Sustainable Development (HESD) Programme, a solid certificate programme, and also encourages and values students' self-learning. WENDI aims at contributing to achieving the SDGs as well as establishing resilient societies through collaborative education and research with established researchers and experts from the United Nations, international organisations, other UNESCO Chairs and Centres, governmental organisations, universities, research institutions and private enterprises. (General Policy)

- 1) Any graduate student belonging to Kyoto University (KU) who has strong interests in carrying out one's activities along interdisciplinary and international frameworks is welcome to register for the WENDI's educational programme. A part of WENDI's activities is open to under-graduate students. (Admission Policy)
- 2) The WENDI's HESD Programme (WENDI-HESD) requires registered students to acquire interdisciplinary perspectives and practical skills by identifying problems, understanding on-going global challenges and exploring implementable solutions. Registered students must fulfil credit requirements, including field training, and demonstrate fundamental academic knowledge of water, energy and disaster management in addition to their own expertise in order to complete each of the WENDI courses. (Curriculum Policy)
- 3) Making the best use of UNESCO's field sites (Geoparks, Biosphere Reserves, World Cultural Heritages and World Natural Heritage Sites) as well as KU's field sites and overseas stations, the WENDI will promote international collaborative research to contribute to achieving the SDGs and building resilient societies. Registered students shall gain creative perspectives and research competency through collaboration with researchers in and out of KU. (Research Policy)
- 4) The WENDI will develop a short-term UNESCO-Chair training programme for registered students as well as students and practitioners from developing countries. The WENDI-HESD will recruit participants and promote information sharing on outcome of the educational and research endeavours through UNESCO's networks. (International Contribution Policy)

## 1.2 Outline of UNESCO Chair WENDI

The UNESCO Chair WENDI aims to promote multi-disciplinary and holistic approach for research implementation, knowledge transfer and capacity building in the fields of water, energy and disaster management, and linkages to other sectors (bioresources and ecosystems, river basins from mountain to ocean, resilient societies, climate change and data science) in Kyoto University (KU) and partner organizations all over the world. This is done by developing a comprehensive and trans-disciplinary Higher Education for Sustainable Development (HESD) programme to establish a 'KU-Model of HESD' and by providing unique international collaborative research using existing UNESCO-Sites including Geoparks, Biosphere Reserves and Cultural, Natural and Mixed World Heritage Sites and domestic and overseas research sites of Kyoto University as the application fields.

To achieve this aim, WENDI will organize education and training programme targeting students and practitioners mainly from developing countries, formulate related education and training materials and continue to contribute to the activities in the International Hydrological Programme (IHP), especially ones of the UNESCO IHP Regional Steering Committee (RSC) for Asia and the Pacific region, as well as UNESCO's Man and the Biosphere Programme (MAB) and the International Geoscience and Geoparks Programme (IGGP). It will also contribute to advanced and trans-disciplinary studies and scientific research projects in the fields mentioned above. The WENDI will also align with IHP's international initiatives such as the promotion of water-related studies in collaboration with FRIEND, IFI, IDI, and IIWQ by developing new theories and technologies for monitoring, assessing, predicting and managing global risks in the world including climate change. Furthermore, the WENDI will contribute to the field of data science which is inseparable from the practical implementations of the above activities.

Overall, the Kyoto University UNESCO Chair WENDI will emphasise on the involvement of policy makers and practitioners to foster science- and technology-based decision-makings to build a sustainable, resilient and survivable society.

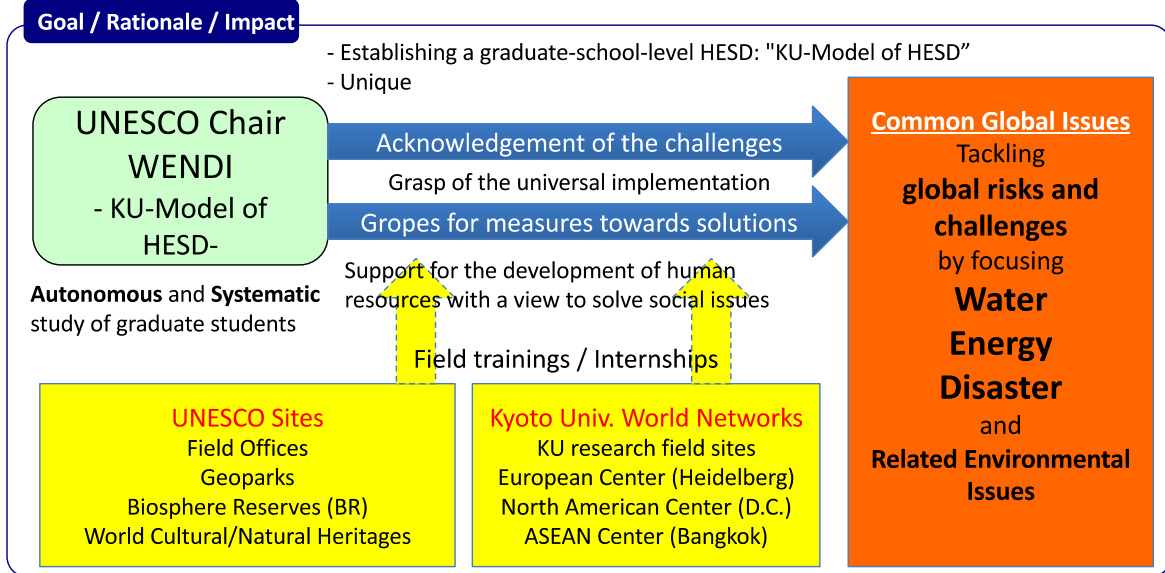
Notes: FRIEND = Flow Regimes from International Experimental and Network Data

IFI = International Flood Initiative

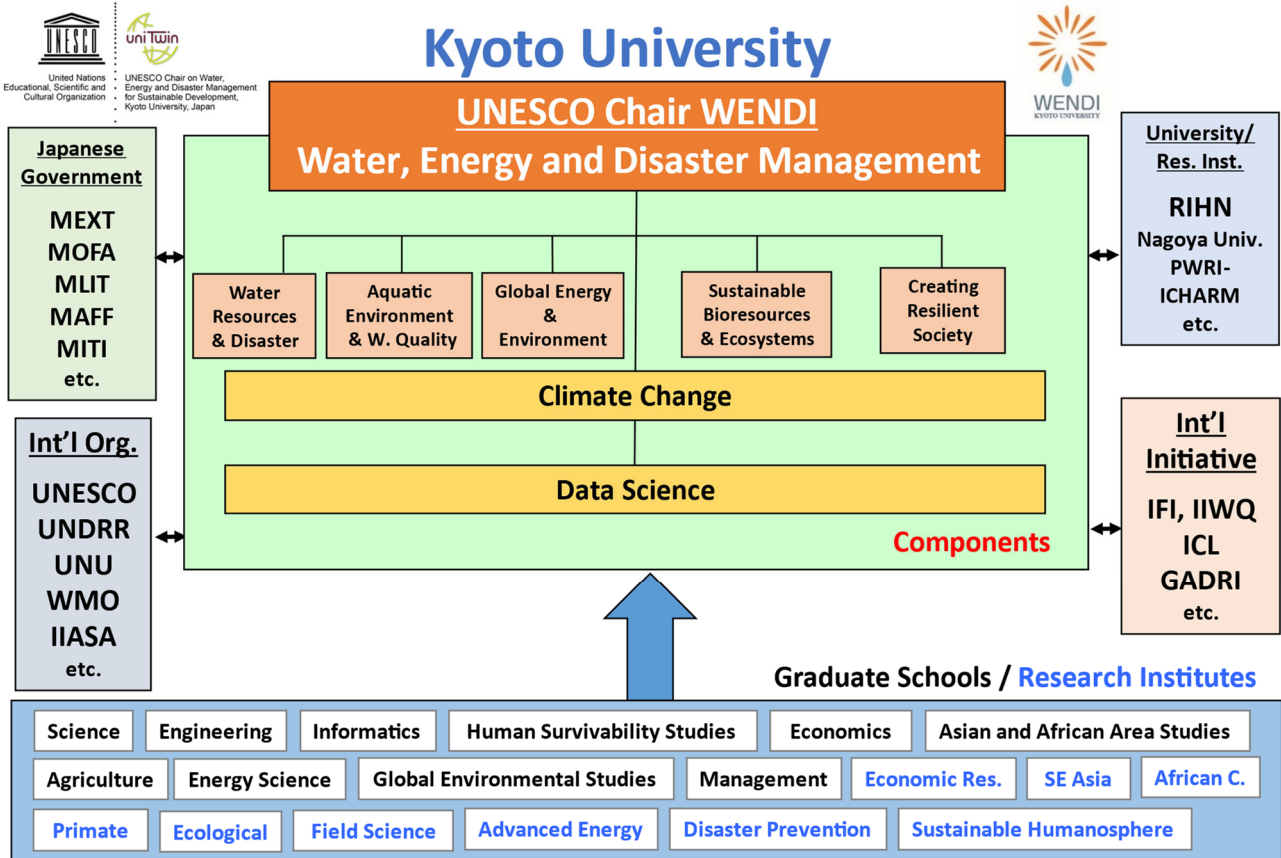
IDI = International Drought Initiative

IIWQ = International Initiative on Water Quality

**Overall objectives:** Development of the human resources with a holistic view in the fields of water, energy and disaster management and related environmental issues by implementing a comprehensive and trans-disciplinary programmes on the Higher Education and Research for Sustainable Development (HESD) at a graduate school level. Using Geoparks, Biosphere Reserves and World Cultural/Natural Heritages and Kyoto University's research networks, WENDI implements international cooperative field-based research activities.



**Fig. 1 Objectives, goal, rationale and impact of this project**



**Fig. 2 Implementation structure of the project**

## 2. Eligibility

Any graduate student at a graduate school in Kyoto University (Master Course, Doctoral Course) can register for the WENDI-HESD Programme.

## 3. Enrollment Procedure

Students wishing to enroll in the WENDI-HESD Programme are required to fill in and submit the registration form for UNESCO Chair WENDI. Please send the form to the designated Office for WENDI via e-mail by no later than 18 April 2025 (Fri.) for the 1<sup>st</sup> semester and 17 October 2025 (Fri.) for the 2<sup>nd</sup> semester. If a student decides to withdraw from the WENDI-HESD Programme, s/he is required to fill in and submit a withdrawal form to Office for WENDI within one month from her/his decision. Please note that both forms require approval seals of the academic advisor of the student(s) at the respective graduate schools. The WENDI reserves the right to terminate the enrolment of any students who do not attend classes entirely or when the students fail to meet the enrolment procedure.

## 4. Registration Procedure

To participate in the WENDI-HESD Programme, it is necessary to complete

- (1) Application procedures at one's graduate school,
- (2) Submission of registration form to the UNESCO Chair Office of WENDI, and
- (3) Submission of "Educational Programme Subjects Application" form both to the Course professor in charge and to the UNESCO Chair Office of WENDI.

### For the 1<sup>st</sup> Semester

<b>(1) Graduate School (Registration and Audit Application) Deadline: the due date of each school</b>	
<b>(2) WENDI-HESD Programme (Registration)</b>	<b>Deadline: 18 April 2025 (Fri.)</b>
<b>(3) Educational Programme Subjects Application</b>	<b>Deadline: 30 April 2025 (Wed.)</b>

### For the 2<sup>nd</sup> Semester

<b>(1) Graduate School (Registration and Audit Application) Deadline: the due date of each school</b>	
<b>(2) WENDI-HESD Programme (Registration)</b>	<b>Deadline: 17 October 2025 (Fri.)</b>
<b>(3) Educational Programme Subjects Application</b>	<b>Deadline: 27 October 2025 (Mon.)</b>

- (1) Registration procedure at graduate schools

Most of the classes of the Programme are derived from classes offered by respective graduate schools of Kyoto University. Students wishing to enroll at the WENDI-HESD Programme are required to register themselves to attend in their own school and/or request for permission to audit the classes at the respective other graduate schools.

- (2) Registration for the UNESCO Chair

Choosing one of the four Courses (A-D) of the WENDI-HESD Programme, submit the application form with your supervisor's signature/seal to the UNESCO Chair Office of WENDI by e-mail.

- (3) Submission of the Educational Programme Subjects Application

Students registered by (1) above should submit "Educational Programme Subjects Application" for the Course chosen both to the person (or office) in charge of each Course and to the WENDI Secretariat as indicated in the form.

See APPENDIX I (p.31), especially for the subject codes.

Grade evaluation will be shown on the grade register of the graduate school to which students belong. Please be sure to complete (1), (2) and (3) above.

See also updates at its news page: <http://wendi.kyoto-u.ac.jp/news/index.html>.

## 5. WENDI-HESD Programme Courses and Faculty Members in Charge

<b>A. Water Resources and Disaster Management Course (WRDM)</b>	
Faculty members	Prof. Yasuto Tachikawa (Chief) Prof. Tomoharu Hori, Prof. Kenji Tanaka, Prof. Yutaka Ichikawa, Prof. Takahiro Sayama, Prof. Sameh Ahmed Kantoush, Assoc. Prof. Sunmin Kim, Assoc. Prof. Kazuaki Yorozu, Assoc. Prof. Tomohiro Tanaka, Specially-Appointed Assoc. Prof. Mohamed Saber

<b>B. Aquatic Environment &amp; Water Quality Course (AEWQ)</b>	
Faculty members	Prof. Yosuke Yamashiki (Chief) Prof. Sadahiko Itoh, Prof. Kei Saito Prof. Tomonari Matsuda, Prof. Shinya Echigo

<b>C. Global Energy and Environment Course (GEEC)</b>	
Faculty members	Prof. Benjamin Craig McLellan (Chief) Prof. Hideaki Ohgaki, Assoc. Prof. Seiichi Ogata

<b>D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM)</b>	
Faculty members	Prof. Keisuke Katsura(Chief) Prof. Satoshi Tachibana, Assist. Prof. Daisuke Naito, Prof. Yosuke Yamashiki

<b>E. Connectivity of Hills, Humans and Oceans Course (CoHHO)</b>	
Recruitment has been terminated since Academic Year 2021.	

<b>F. Course for Creating Resilient Societies (CRS)</b>	
Recruitment has been terminated since Academic Year 2023.	

### Faculty members for Common Subjects, etc.

Prof. Michinori Hatayama, Prof. Tetsuya Takemi, Junior Assoc. Prof. Florence Lahournat

## 6. 2024 Syllabus (WENDI-HESD Programme – Programme contents and completion criteria)

### I. Common Recommended Subject

In the general education courses "Global Survivability Studies" introduces actual cases at the global and regional levels with respect to water, energy and disaster management, along with a discussion of how to respond towards a sustainable society. In addition, we will discuss what needs to be considered in situations where changes are expected in climate, population, energy and socio-economics. Furthermore, the role of UNESCO and other UN agencies will be introduced, along with sustainable development goals (SDGs) and education for sustainable development (ESD).

Name of subjects	Credits	Offered by	Purposes
Global Survivability Studies	2	Interdisciplinary Graduate Courses (Graduate School of Engineering)	Examples of hazardous events and societal anxieties such as large-scale natural disasters, sudden human-made disasters/accidents, regional environmental changes such as environmental degradation and infectious diseases, and food security will be introduced at both global and regional levels. Students will learn how to respond towards a sustainable society at the national, local, and community levels. Furthermore, we will discuss what needs to be considered in situations where changes are expected, such as climate, population, energy, food security, and socio-economics. In addition, we introduce the role of UNESCO and other UN agencies, sustainable development goals (SDGs), the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Paris Agreement on climate change.

Overview: The issues covered in this lecture are global ones that cannot be solved by a single academic field. Approaches from various fields such as water, energy, disaster management and food security are essential. In this course, such interdisciplinary content will be discussed, and teachers and students with different academic backgrounds will discuss together. In the lecture, an overview of the United Nations, particularly UNESCO, and their activities, as well as the international agreements such as SDGs, will also be explained.

#### UN Agencies and UNESCO

This lecture explains United Nations (UN) and its various agencies. Especially focusing on the UN Educational, Scientific and Cultural Organization (UNESCO), the lecturer introduces the structure of UNESCO, its activities, UNESCO Chairs and science programs such as International Hydrological Programme (IHP), Man and the

Biosphere Programme (MAB), and International Geoscience and Geoparks Programme (IGGP). UNESCO-designated sites are also introduced for future international cooperation research projects under the UNESCO Chair WENDI: World Cultural Heritages, World Natural Heritages, Biosphere Reserves, and Geoparks. This part also mentions internship and job opportunities in UNESCO.

### International Agreements

This lecture introduces three international agreements: the 2030 Agenda for Sustainable Development (SDGs), the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR), and the Paris Agreement of UNFCCC (UN Framework Convention on Climate Change). These agreements are current important global agenda (action plans) toward 2030. Students can learn what they are and how to read/write such UN documents. It is also requested in the classroom to relate each student's research theme to these agreements and present it.

\* If you registered as a WENDI student before the 2022 academic year and have not attended the guidance lecture, please contact the WENDI secretariat via “secretariat\_wendi@mail2.adm.kyoto-u.ac.jp”.

## II. Common Elective Subjects

Name of subjects	Credits	Offered by	Purposes
Field Laboratories in Multi-scale Earth Dynamics I  (Offered biennially, offered in 2025)	2	Graduate School of Science	Fundamental principles on various observations of the atmosphere are explained in this class, and it is stated how to use such instruments to observe atmospheric variations in several days hands-on training. For example, observations of temperature, water vapor, wind speed and direction over land and ocean with high accuracy and resolution are introduced. Analysis methods of the observed data are also given to understand the multiple scales in time and space of the atmospheric variations.
Meso-scale Precipitation Systems and Severe Storms (Applied Meteorology IIA)  (English Class) (Offered biennially, not offered in 2025)	2	Graduate School of Science	A suite of lectures on meso- and micro-scale meteorology is given, which provides the basis for advanced research in meteorological disaster or atmospheric pollution. Special attentions are focused on cumulus convection and the severe storms. The dynamics and mechanism of various phenomenon such as wind gust, tornado, down burst, squall line and even the tropical storm and the impacts of climate change on those phenomena are explained.
Others		To be announced	



### III. Field Exercise

Some of the courses (see the below section V) require the students to carry out at least one field exercise. WENDI's HP lists various fields for the students to consider planning their own exercises (the list is available only in Japanese as of April 2019). See: <http://wendi.kyoto-u.ac.jp/news/index.html>

### IV. UNESCO-IHP Training

**Couse A: Water Resources and Disaster Management Course (WRDM)** requires the students to take the UNESCO-IHP Training. The outline of this IHP training is given in Appendix of the brochure. Kindly be requested to register for the training in due course.

### V. Details of Courses A-D

The details of the Courses A-D are given from the next page.

#### (1) About subjects taken in previous years

WENDI-HESD programme approves academic credits already taken in previous years, upon requested by students.

Please submit “Application for Certification of Previously Acquired Subjects” as well as a copy of your academic transcript issued by your graduate school.

The following table shows the maximum number of credits that can be approved.

Course	Maximum number of credits
A. WRDM	4
B. AEWQ	5
C. GEEC	4
D. SBM	4

#### (2) About duplication of registered subjects

Note that a subject that is registered in a Course you selected cannot be approved when you take another Course.

## **A. Water Resources and Disaster Management Course (WRDM)**

### **1. Outline**

This course offers an interdisciplinary and international programme for students to understand challenges that societies face whilst addressing these issues in terms of the hydrologic cycle and human activities. The course provides intensive international lectures to obtain the latest knowledge on climate change impacts on water resources, water-related disasters and ecosystem services, thus offering an opportunity to study strategies of integrated basin management to realise resilient society under climate change. The course also provides a field exercise to study natural environment and sustainable developments to learn the hydrologic cycle and human interventions. Through the course, students learn and obtain knowledge, technologies and perspectives to contribute to the SDGs and establishment of resilient societies.

### **2. Programme contents and completion criteria**

This course consists of subjects provided by the Graduate School of Engineering and other graduate schools participating in the UNESCO Chair WENDI.

#### **(1) Programme contents**

##### **① Compulsory subjects (6 credits)**

Subjects	Credits	Offered by	Purposes
UNESCO-IHP Training	2	The training course is provided as 'Practice in Infrastructure Engineering' or 'Practice in Urban Management' provided by the Graduate School of Engineering.	1) to obtain the latest knowledge on climate change impacts on water resources, water related disasters and ecosystem services, 2) to make practice on rainfall-runoff-inundation estimation at river basin scale, and 3) to discuss strategies of integrated basin management to realize resilient society under climate change.

Field Exercise	2	The field exercise is provided as 'Exercise on Project Planning' or 'Capstone Project' for the master course program, 'Practice in Advanced Infrastructure Engineering A, B', 'Practice in Advanced Urban Management A, B', or 'Internship for Human Security Engineering' for the doctoral course program, which are provided by the Department of Civil and Earth Resources Engineering and Department of Urban Management of Graduate School of Engineering.	Choosing a particular field site, such as one of WENDI exercise fields, a student studies natural environment and sustainable developments in terms of hydrologic cycle and human activities.
Global Survivability Studies	2	Interdisciplinary Graduate Courses (Graduate School of Engineering)	Examples of hazardous events and societal anxieties such as large-scale natural disasters, sudden human-made disasters/accidents, regional environmental changes such as environmental degradation and infectious diseases, and food security will be introduced at both global and regional levels. Students will learn how to respond towards a sustainable society at the national, local, and community levels. Furthermore, we will discuss what needs to be considered in situations where changes are expected, such as climate, population, energy, food security, and socio-economics. In addition, we introduce the role of UNESCO and other UN agencies, sustainable development goals (SDGs), the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Paris Agreement on climate change.

② Elective subjects (4 credits)

Select at least four credits from subjects provided by other UNESCO Chair courses or the Common Elective Subjects.

**(2) Language**

English. Japanese will be used depending on the situation.

**(3) Requirement for completion**

Compulsory subjects (6 credits) and elective subjects (4 credits).

**(4) Certificate conferment**

Each student who completed the course successfully will receive a Certificate from the UNESCO Chair WENDI.

## **B. Aquatic Environment and Water Quality Course (AEWQ)**

### **1. Outline**

The objective of the course is to acquire the necessary knowledge to evaluate and manage aquatic environments by learning about aquatic environments on different scales (catchment, regional, global), together with the basic and applied monitoring skills of water quality. This course also aims to contribute to the achievement of UN Sustainable Development Goals (SDGs), as primary objectives for Goal 6: Clean Water and Sanitation, Goal 14: Life Below Water, as well as the secondary objectives for Goal 3: Good Health and Well-being, Goal 11: Sustainable Cities and Communities, and Goal 15: Life On Land. The achievement of the course will also be affected by Goal 13: Climate Action.

In addition to the above mandatory and elective subjects, students may have the chance to delve into the details of their individual research projects on monitoring aquatic environments with field sensors and remote sensing skills. Students are requested to learn local and global perspectives on the aquatic environment by taking a look at their accessible & familiar bodies of water, such as Lake Biwa, and through international experiences to obtain general views on global-scale water quality issues.

The course has a direct linkage with International Initiative of Water Quality (IIWQ) led by UNESCO-IHP through a Co-Chair of WENDI, thus, additional information on the global-scale water quality associated activities will enhance the achievement of each objective.

### **2. Programme contents and completion criteria**

#### **(1) Programme contents**

This course consists of the subjects provided by the Graduate School of Advanced Integrated Studies in Human Survivability, the Graduate School of Global Environmental Studies, the Graduate School of Engineering, and the Graduate School of Agriculture, joined by the UNESCO Chair WENDI.

#### **① Common Recommended subject (2 credits)**

Global Survivability Studies

② Compulsory subjects (6 credits)

Name of Subjects	Credits	Offered by	Purposes
Global Survivability Risk Management	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	To learn several environmental risks on a global scale, together with the potential risk for survivability for all living creatures on Earth through an inter-comparison among each of those risks, scales, and occurrence probability. To learn about Earth's (terrestrial) ecological systems based on the GAIA concept, and new types of risks which have become critical issues throughout the progress of civilization. Special focus is given to the issues of global warming, nuclear disasters including environmental risks caused by nuclear waste, and other possible environmental disasters and hazards which may affect human civilization. Our final goal is to develop an overall image of a "sustainable civilization."
Earth, the Water Planet	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	To learn about planet Earth as the Water Planet. The critical conditions for the formation of an ocean and the presence of the hydrological cycle on Earth will be discussed by introducing a basis of planetary physics and the history of the Earth. To learn about the conditions that had to occur for the ocean and atmosphere to form, along with the climate effects that brought about oceanic circulation and the hydrological cycle.
UNESCO Chair Field Work: Water, Forest and Society	2	Graduate School of Agriculture & Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	To acquire basic knowledge on forest ecology, biodiversity, hydrology, ecosystem management, and the sustainable development of human society as well as an understanding of the methodology of fieldwork.

③ Elective subjects (4 credits)

Select at least four credits from subjects listed in the following table, subjects provided by other UNESCO Chair courses or the Common Elective Subjects.

Name of Subjects	Credits	Offered by	Purposes
Introduction to Green Chemistry	2	Graduate School of Advanced Integrated Studies in Human Survivability	Green Chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances in the field of chemistry. This unit teaches the introduction to green chemistry by following its twelve principles.

Watershed Water Environment Management	1	Graduate School of Global Environmental Studies	To give the basics and application of several methods related to the comprehensive management of the whole watershed for the solution of several pollution problems.
Environmental Risk Analysis	2	Graduate School of Engineering	To comprehend basic knowledge about the environmental risks associated to various substances, such as how artificial chemical substances, heavy metals and radioactive materials, have been spread globally and now contaminate the environment.
Water Sanitary Engineering	2	Graduate School of Engineering	To comprehend sanitary engineering quantitatively. Students will learn methods to quantify chemical and microbial risk in drinking water, and realize concept and methods of risk management and control.
Space Medicine-The Study of the effects on human during space staying	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	Understand how the space environment affects humans. In addition, they will develop their own ability to think about what problems will be encountered in space for several years and what needs to be done to solve them.
Advanced Studies Harmonizing Disaster Management and Environmental Conservation	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	To address complex challenges including catastrophic disasters and global environmental changes in a modern risk society, students are supposed to build up capacities to understand from complex perspectives through different cases, and think specific ways to solve related problems with faculties and students who are in different fields beyond existing academic demarcations.

## **(2) Language**

English. Japanese might be used depending on the situation.

## **(3) Requirement for completion**

Compulsory subjects (6 credits), and elective subjects (4 credits).

## **(4) Certificate conferment**

Each student who completed the course successfully will receive a Certificate from the UNESCO Chair WENDI.

## C. Global Energy and Environment Course (GEEC)

### 1. Outline

World energy consumption has been increasing rapidly, with the tendency predicted to continue in the future. Energy production and consumption contributes to the development of industry, human life, and human security, however it also causes serious environmental impacts from local air-pollution to global climate change. GEEC offers an academic program to understand the relation between energy consumption and environmental impacts, and to foster personnel to solve these issues. GEEC expects students with a variety fields in their background, engineering, science, economics, international relations etc. to learn from each other during the course.

### 2. Program contents and completion criteria

The course consists of subjects provided by the Kyoto University Graduate School of Energy Science and other graduate schools participating in the UNESCO Chair WENDI.

#### (1) Programme contents

##### ① Common Recommended subject (2 credits)

Global Survivability Studies

##### ② Compulsory subjects (6 credits)

Name of Subjects	Credits	Offered by	Purposes
Socio-Environmental Energy Science I	2	Graduate School of Energy Science (Note: The class offers in English and in Japanese alternatively every year.)	Students will obtain broad knowledge and understanding of fundamental aspects of energy use.
Socio-Environmental Energy Science II	2	Graduate School of Energy Science (Note: The class offers in English and in Japanese alternatively every year.)	Students will have broad knowledge and understanding of the fundamental aspects of environmental issues related to energy use.
Field Research Project	2	Graduate School of Energy Science	Students will acquire a global perspective on energy and environment through study and surveys at institutes and industries outside of campus.

③ Elective subjects (at least 4 credits)

In order to understand the background of Energy and Environmental issues, select at least four credits from subjects provided by other UNESCO Chair courses and/or Common Elective Subjects.

**(2) Language**

As a rule, lectures are delivered in English; however, depending on the subject, lectures may be also delivered in Japanese. So please refer to the syllabus for more details.

**(3) Requirement for completion**

Compulsory subjects (6 credits), and not less than 10 credits including elective subjects.

Subjects	Requirement	Completion criteria
Compulsory	6 credits	> = 10 credits
Elective	2 subjects offered by other courses, Common Recommended Subject or Common Elective Subjects	

**(4) Certificate conferment**

Each student who has completed the course successfully will receive a Certificate from the UNESCO Chair WENDI.

Note: The details of each subject will be provided at the following website:

<http://www.energy.kyoto-u.ac.jp/jp/education/curriculum-subjects/>



## D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM)

### 1. Outline

This course aims to foster human resources who are equipped with scientific knowledge on sustainable utilization of bioresource, understand the institutions for ecosystem management, and are able to contribute to the achievement of UN's Sustainable Development Goals, especially Goal 2: Zero Hunger, Goal 15: Life on Land, Goal 6: Clean Water, and Goal 13: Climate Action. Students are requested to acquire a global view of food, bioresource, water resource, and climate change through the lectures. Students are also requested to acquire a local view of SDGs through the field work at Kawakami-Mura (Nara Prefecture), a village of water source of Yoshino River, located in a UNESCO Biosphere Reserve, and being a center of Yoshino Forestry. Furthermore, the course requires students to join subjects provided by the other graduate-schools participating in the UNESCO Chair WENDI. Through these lectures and practices, the course aims to foster the person with interdisciplinary scope, being able to work with people of various disciplines, and contributing to the achievement of SDGs through research and/or practical activity.

### 2. Programme contents and completion criteria

This course consists of subjects provided by the Graduate School of Agriculture, Graduate School of Global Environmental Studies (Staff of Field Science Education and Research Center) and other graduate schools participating in the UNESCO Chair WENDI.

#### (1) Programme contents

##### ① Compulsory subjects (6 credits)

Name of Subjects	Credits	Offered by	Purposes
Tropical Agricultural Ecology (Offered biennially, not offered in 2025)	2	Graduate School of Agriculture	To know the newest knowledge on agriculture, agricultural ecology, agricultural systems and agricultural environment in the tropics. To be able to discuss about agricultural production and environmental issues in the tropics, which influence global future based on the data. To be able to explain clearly global scale issues on agricultural production and environment.
UNESCO Chair Field Work: Water, Forest and Society	2	Graduate School of Agriculture & Graduate School of Advanced Integrated Studies in Human Survivability	To acquire basic knowledge on forest ecology, biodiversity, hydrology, ecosystem management, and the sustainable development of human society. To understand the methodology of fieldwork.

Global Survivability Studies	2	Interdisciplinary Graduate Courses (Graduate School of Engineering)	Examples of hazardous events and societal anxieties such as large-scale natural disasters, sudden human-made disasters/accidents, regional environmental changes such as environmental degradation and infectious diseases, and food security will be introduced at both global and regional levels. Students will learn how to respond towards a sustainable society at the national, local, and community levels. Furthermore, we will discuss what needs to be considered in situations where changes are expected, such as climate, population, energy, food security, and socio-economics. In addition, we introduce the role of UNESCO and other UN agencies, sustainable development goals (SDGs), the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Paris Agreement on climate change.
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① Compulsory elective subject (2 credits)

Select at least two credits from subjects provided by Graduate School of Agriculture, and Graduate School of Global Environmental Studies (Staff of Field Science Education and Research Center) shown below.

Name of Subjects	Credits	Offered by	Purposes
Special Lecture on Forest Hydrology  (Offered biennially. offered in 2025)	2	Graduate School of Agriculture	The aim of this lecture is to understand how forest hydrology relates with various ecosystem functions and govern our environments.
Sustainable Agriculture: A Cross-Cultural Perspective	2	Graduate School of Agriculture	Students will develop a “peripheral vision” that enables them to build on their previous experiences and training, and take a transdisciplinary perspective. To practice skills, such as communication, collaboration, facilitation, and critical thinking to deal with the multiple dimensions of agri-food system challenges. Students will learn, through case studies, to apply transdisciplinary approaches when they are faced with making decisions in complex real-world situations.
Agriculture and Environment in Japan	2	Graduate School of Agriculture	Understanding some aspects of agriculture and environment conservation in Japan, and in a student's mother country.

Water Resources Engineering  (Offered biennially. not offered in 2025)	2	Graduate School of Agriculture	Since hydraulic structures are generally designed based on design conditions derived from hydrological time series data, modeling of time series data is essential for designing the structures. This course focuses on time series analysis and nonlinear systems; Basic principles of hydrologic time series modeling and types of statistical models related to water resources engineering are presented in the first half of this course, and dealing with nonlinear data is practiced in the second half of this course.
Integrated Forest to Coastal Management	2	Graduate School of Global Environmental Studies	This course addresses how human activities may be adjusted to build a symbiotic and sustainable relationship between humans and their environment based on CoHHO (The study of the connectivity of Hilltop, Human and Ocean) from the integrated management perspectives of river basins and coastal areas. Top caliber researchers who are respected authorities in their field of disciplines will hold lectures in English.

③ Elective subjects (2 credits)

Select at least two credits from subjects provided by other UNESCO Chair courses or Common Elective Subjects.

**(2) Language**

English. Japanese will be used depending on the situation.

**(3) Requirement for completion**

Compulsory subjects (6 credits), compulsory elective subjects (2 credits) and elective subjects (2 credits).

**(4) Certificate conferment**

Each student who completed the course successfully will receive a Certificate from the UNESCO Chair WENDI.

## F. Course for Creating Resilient Societies (CRS)

No Recruitment is planned in Academic Year 2024

### 1. Outline

This course is a new programme for promoting resilience thinking and resilience practices, which is based on Creating Resilient Societies Research Group in the Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS). ‘Resilience’ is broadly defined in this course as ‘the capacity to continue to develop flexibly in the major change and adversities’. This course emphasizes the linkages between human, social and ecological systems and resilience and aims at fostering human resources who can engage in creating resilient societies collaboratively. More specifically, this course focuses on the linkage of human, society, nature and resilience from different angles across human, social and natural science perspectives and provides collaborative dialogue-based lectures which will be formulated into collaborative knowledge for creating resilient societies. This course will enable students to cultivate human capacities to survive in dynamic changes in natural and social environments, and build up academic and practical capacities to contribute to solving problems for sustainable societies including implementation of sustainable development goals (SDGs) with advanced problem-solving approaches.

### 2. Programme contents and completion criteria

This course consists of subjects provided by GSAIS and other graduate schools participating in the UNESCO Chair WENDI.

#### (1) Programme contents

① Common compulsory subject ( 0 credit)

UNESCO Chair WENDI Guidance Lecture

② Compulsory subjects (4 credits (2 subjects) and compulsory elective 2 credits (at least 1 subject from 2 compulsory elective subjects is required to take or if wish to take both subjects, the one subject (2 credits) can be applied to the elective subjects ④ below.)

Name of Subjects	Credits	Offered by	Purposes
Resilience in Human, Social and Ecological Systems and Sustainability	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	1) To learn the essential linkage between resilience and human, social and ecological systems from multi-faceted perspectives and systemically and cultivate philosophical views for overarching perspectives beyond existing academic lines for future human society, 2) To master systems thinking, design thinking and resilience thinking, to link those ways of thinking to addressing sustainable society, and 3) To build up collaborative design capacity for problem-solving oriented approaches for sustainable society-related challenges we are facing.

Advanced Studies Harmonizing Disaster Management and Environmental Conservation	2	Graduate School of Advanced Integrated Studies in Human Survivability (GSAIS)	1) With the focus on the recent dynamic changes in risk society, students will learn case examples of domestic and international disasters, environmental degradation, and planning of harmonized disaster prevention and environmental conservation, and acquire the capacity to think how to harmonize disaster prevention or mitigation and environmental conservation. 2) By mastering social science and psychological approaches and resilience approach which overarches different academic areas, students will cultivate the capacity to think specific ways to mitigate impacts on environments and disasters. 3) This class is to learn the relationships between disasters and earth environment issues, and the relationships between those issues and human/social aspects, from not only natural science and engineering, but also social science and psychological approach and resilience approach.
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### ③ Compulsory Elective Subjects

Social Innovation and Resilience ※	(2)	UNESCO Chair WENDI	To learn how to link resilience approach with social innovation through resilience practitioners.
Practices for Creating Resilience ※	(2)	UNESCO Chair WENDI	To build up practical capacities for resilience by practicing resilience approach and sharing the learning among people with different backgrounds.

※ Credits of these subjects are approved by the Course for Creating Resilient Societies (CRS), Units in the parenthesis mean the credit for completing the CRS, not for credits for your school for the graduation. Detail information will be provided before/around July through emails from the CRS.

### ④ Elective subjects (4 credits)

Select at least four credits from subjects provided by other UNESCO Chair courses, Compulsory Elective Subjects or Common Elective Subjects.

**(2) Language** English. Japanese will be used depending on the situation.

### (3) Requirement for completion

UNESCO Chair WENDI Guidance Lecture, compulsory subjects 4 credits (2 subjects) + 1 compulsory elective subject (2 credits), and elective subjects (4 credits).

### (4) Certificate conferment

Each student who completed the course successfully will receive a Certificate from the UNESCO Chair WENDI.

## 7. Forms 様式

- **Registration** 登録願
- **Educational Programme Subjects Applications (A-D)** 科目履修届(A-D)
- **Application for Certification of Previously Acquired Subjects** 既修得科目認定申請書
- **Certificate Request** 修了証交付願
- **Withdrawal** 辞退願

These documents can be downloaded from the website of WENDI.

これら様式は WENDI のウェブサイトからダウンロードしていただけます。

<http://wendi.kyoto-u.ac.jp/news/index.html>

提出日 Date of Submission D\_\_\_\_\_ / M\_\_\_\_\_ / Y\_\_\_\_\_



京都大学  
KYOTO UNIVERSITY

**Registration Form**  
**Higher Education and Research for Sustainable Development (HESD) Programme,**  
**UNESCO Chair WENDI, Kyoto University**  
**登録願**

I would like to participate in the HESD Programme of UNESCO Chair WENDI, Kyoto University.

京都大学ユネスコチェア WENDI が提供する持続可能な開発のための教育(HESD)プログラムへの参加を希望します。

Course of your choice (Please check one) コース選択 (1箇所)に✓を入れる)	A. Water Resources and Disaster Management Course (WRDM) 水資源マネジメント・水防災ユネスコチェアコース		
	B. Aquatic Environment and Water Quality Course (AEWQ) 水環境・水質ユネスコチェアコース		
	C. Global Energy and Environment Course (GEEC) エネルギー科学ユネスコチェアコース		
	D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM) 持続的生物資源利用と生態系管理ユネスコチェアコース		
Name 名前 (Please print)	in Roman characters ローマ字表記		in other language if applicable (日本語、中国語など)
Nationality 国籍		Grade (Please circle one) 学年 (1箇所)に○をつける)	Master/Doctor 博士前期(修士)/後期課程 M1 M2 D1 D2 D3
Student ID No. 学生番号			5-year PhD Course 博士課程(5年一貫) D1 D2 D3 D4 D5
Graduate School 研究科名		Special Note (Double Degree Programme, etc.) ダブルディグリーなど特記事項	
Department 専攻		Laboratory 研究室	
Telephone 電話番号 (携帯可)	Private 私用 : _____ Laboratory 研究室 : _____		
E-mail (KUmail) 京大メールアドレス	@st.kyoto-u.ac.jp		
Enrollment year and month at Graduate School 大学院入学年月	Year 年 / Month 月	Name of the academic supervisor 指導教員名	Signature or Seal 署名または印 (印)
Please submit the scanned copy of this document via e-mail to <a href="mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp">secretariat_wendi@mail2.adm.kyoto-u.ac.jp</a> by the deadline to be announced. この書類に記入し、スキャンコピーを所定の期日までに <a href="mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp">secretariat_wendi@mail2.adm.kyoto-u.ac.jp</a> にお送り下さい。			

This document can be downloaded from the website of WENDI.



# Educational Programme Subjects Application

## A. Water Resources and Disaster Management Course (WRDM) 水資源マネジメント・水防災ユネスコチェアコース科目履修届

以下のとおり、コース科目履修届を提出します。

Registrant Info. 登録者情報

Name 氏名:			
Nationality 国籍:		Gender 性別:	<input type="checkbox"/> Male <input type="checkbox"/> Female
Graduate School 研究科:			
Depaartment 専攻:			
Master/Doctoral Programme 修士/博士 課程 (M1, M2, D1, D2, D3, D4, D5):			
Special Note: (Double Degree Programme, etc.) ダブルディグリーなど特記事項			
Entrance Year 入学・進学年度:			

History of revision 改訂履歴

First submission 初期登録:	YYYY/MM/DD
Revised (Ver. 2) 改訂 (第2版)	YYYY/MM/DD
Revised (Ver. 3) 改訂 (第3版)	YYYY/MM/DD
Revised (Ver. 4) 改訂 (第4版)	YYYY/MM/DD

- Notes: 1. Fill in the green-coloured boxes. 記入するところは、「所属・氏名」欄、「改訂履歴」欄、「履修年」欄及び「選択科目」欄(緑色着色部分)です。
2. \*Year should be 2020, 2021, etc to identify which year you will take or you have taken the subject. 履修する年(履修済みの場合は履修年)を「履修年」欄に記入して下さい。
3. To take regular subjects, registration at your own school is necessary (in case of subjects in other schools, you should submit audit application to the school.) コース科目は研究科の正規科目でもあるので、各自が所属する研究科で所定の履修登録手続き(他研究科の科目であれば、聴講願手続き)を完了しなければなりません。

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数	Semester 開講期	Day/ Time 曜・時限	* Year 履修年	Provided School/Department 提供部局・専攻
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Compulsory Subjects (6 Credits) / 必修科目 (6単位)

X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、山敷、松田	2	First Semester 前期	Thu/5 木/5		Interdisciplinary Graduate Courses 全学共通科目
AC1	UNESCO-IHP Training ユネスコIHP(国際水文学計画)研修	HORI, TANAKA, others 堀、田中 ほか	2	Second Semester 後期	Intensive 集中		DPRI 防災研究所
AC2	Field Exercise フィールド実習  One of below subjects is recognized as Field Exercise  - Self Planning Project 自主企画  - Capstone Project キャップストーンプロジェクト  - Practice in Advanced Infrastructure Engineering A, B 社会基盤工学総合実習A, B  - Practice in Advanced Urban Management A, B 都市社会工学総合実習A, B  - Internship for Human Security Engineering 人間安全保障工学インターンシップ	Related faculty 関係教員	2	Year-round 通年	N.A.		Engineering 工学研究科

Common Elective Subjects and Elective Subjects (≥ 4 Credits) / 共通選択科目及び選択科目 (4単位以上)

Common Elective Subjects/ 共通選択科目							
XE2	Field Laboratories in Multi-Scale Earth Dynamics I 多階層地球変動科学実習I	YOSHIDA, SAKAZAKI, TANJI 吉田、坂崎、丹治	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中		Science 理学研究科
XE3	Meso-Scale Precipitation Systems and Severe Storms (Applied Meteorology IIA) メソ降水系・シビアストーム(応用気象学IIA)	TAKEMI, ITO 竹見、伊藤	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/4 月/4		Science 理学研究科
Elective Subjects/ 選択科目							

Please submit this document via e-mail to A Course Prof. Takahiro Sayama <sayama.takahiro.3u@kyoto-u.ac.jp> as well as to <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> by the deadline to be announced.

この書類に記入し、所定の期日までにAコース佐山敬洋教授<sayama.takahiro.3u@kyoto-u.ac.jp> 及び <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> にお送り下さい。





# Educational Programme Subjects Application

## B. Aquatic Environment and Water Quality Course (AEWQ) 水環境・水質ユネスコチェアコース科目履修届

以下のとおり、コース科目履修届を提出します。

Registrant Info. 登録者情報

Name 氏名:			
Nationality 国籍:		Gender 性別:	<input type="checkbox"/> Male <input type="checkbox"/> Female
Graduate School 研究科:			
Depaartment 専攻:			
Master/Doctoral Programme 修士/博士 課程 (M1, M2, D1, D2, D3, D4, D5):			
Special Note: (Double Degree Programme, etc.) ダブルディグリーなど特記事項			
Entrance Year 入学・進学年度:			

History of revision 改訂履歴

First submission 初期登録:	YYYY/MM/DD
Revised (Ver. 2) 改訂 (第2版)	YYYY/MM/DD
Revised (Ver. 3) 改訂 (第3版)	YYYY/MM/DD
Revised (Ver. 4) 改訂 (第4版)	YYYY/MM/DD

- Notes: 1. Fill in the green-coloured boxes. 記入するところは、「所属・氏名」欄、「改訂履歴」欄、「履修年」欄及び「選択科目」欄(緑色着色部分)です。  
2. \*Year should be 2020, 2021, etc to identify which year you will take or you have taken the subject. 履修する年(履修済みの場合は履修年)を「履修年」欄に記入して下さい。  
3. To take regular subjects, registration at your own school is necessary (in case of subjects in other schools, you should submit audit application to the school.)  
コース科目は研究科の正規科目でもあるので、各自が所属する研究科で所定の履修登録手続き(他研究科の科目であれば、聴講願手続き)を完了しなければなりません。

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数	Semester 開講期	Day/ Time 曜・時限	Year 履修年	Provided School/Department 提供部局・専攻
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Common Recommended Subject (2 Credits) / 共通推奨科目(2単位)

X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、山敷、松田	2	First Semester 前期	Thu/5 木/5		Interdisciplinary Graduate Courses 全学共通科目
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Compulsory Subjects (6 Credits) / 必修科目(6単位)

BC1	Global Survivability Risk Management 地球生存リスク特論	YAMASHIKI 山敷	2	Second Semester 後期	Wed/3 水/3		GSAIS 総合生存学館
BC2	Earth, the Water Planet 水惑星地球	YAMASHIKI 山敷	2	First Semester 前期	Wed/3 水/3		GSAIS 総合生存学館
BC3	UNESCO Chair Field Work: Water, Forest and Society ユネスコチェアフィールドワーク:水と森と社会	YAMASHIKI, NAITO, others 山敷、内藤 ほか	2	Year-round 通年	Intensive 集中		Agriculture, GSAIS 農学研究科、総合生存学館

Common Elective Subjects and Elective Subjects (≥ 4 Credits) / 共通選択科目及び選択科目(4単位以上)

Common Elective Subjects/ 共通選択科目							
XE2	Field Laboratories in Multi-Scale Earth Dynamics I 多階層地球変動科学実習I	YOSHIDA, SAKAZAKI, TANJI 吉田、坂崎、丹治	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中		Science 理学研究科
XE3	Meso-Scale Precipitation Systems and Severe Storms (Applied Meteorology IIA) メソ降水系・シビアストーム(応用気象学IIA)	TAKEMI, ITO 竹見、伊藤	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/4 月/4		Science 理学研究科
Elective Subjects/ 選択科目							
BE4	Introduction to Green Chemistry グリーンケミストリー(環境に優しい化学)入門	SAITO 齋藤	2	Second Semester 後期	Thu/4 木/4		GSAIS 総合生存学館
BE1	Watershed Water Environment Management 流域水環境管理論	ECHIGO, TANAKA 越後、田中	1	First Semester 前期	Tue/1 火/1		GSSES 地球環境学堂
BE2	Environmental Risk Analysis 環境リスク学	MATSUDA, others 松田ほか	2	First Semester 前期	Wed/4 水/4		Engineering 工学研究科
BE3	Water Sanitary Engineering 水質衛生工学	ITO, KOSAKA 伊藤、小坂	2	First Semester 前期	Tue/2 火/2		Engineering 工学研究科
BE5	Space Medicine The Study of the effects on human during space staying 有人宇宙医学	YAMASHIKI, TERADA 山敷、寺田	2	Second Semester 後期	Wed/4 水/4		GSAIS 総合生存学館
BE6	Advanced Studies Harmonizing Disaster Management and Environmental Conservation 環境防災生存学特論	YAMASHIKI, YAMORI 山敷、矢守	2	First Semester 前期	Wed/4 水/4		GSAIS 総合生存学館

Please submit this document via e-mail to B Course Prof. Yosuke Yamashiki <yamashiki.yosuke.3u@kyoto-u.ac.jp> as well as to <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> by the deadline to be announced.

この書類に記入し、所定の期日までにBコース山敷庸亮教授<yamashiki.yosuke.3u@kyoto-u.ac.jp> 及び <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> にお送り下さい。



# Educational Programme Subjects Application

## C. Global Energy and Environment Course (GEEC) エネルギー科学ユネスコチェアコース科目履修届

以下のとおり、コース科目履修届を提出します。

Registrant Info. 登録者情報

Name 氏名:			
Nationality 国籍:		Gender 性別:	<input type="checkbox"/> Male <input type="checkbox"/> Female
Graduate School 研究科:			
Depaartment 専攻:			
Master/Doctoral Programme 修士/博士 課程 (M1, M2, D1, D2, D3, D4, D5):			
Special Note: (Double Degree Programme, etc.) ダブルディグリーなど特記事項			
Entrance Year 入学・進学年度:			

History of revision 改訂履歴

First submission 初期登録:	YYYY/MM/DD
Revised (Ver. 2) 改訂(第2版)	YYYY/MM/DD
Revised (Ver. 3) 改訂(第3版)	YYYY/MM/DD
Revised (Ver. 4) 改訂(第4版)	YYYY/MM/DD

- Notes: 1. Fill in the green-coloured boxes. 記入するところは、「所属・氏名」欄、「改訂履歴」欄、「履修年」欄及び「選択科目」欄(緑色着色部分)です。
2. \*Year should be 2020, 2021, etc to identify which year you will take or you have taken the subject. 履修する年(履修済みの場合は履修年)を「履修年」欄に記入して下さい。
3. To take regular subjects, registration at your own school is necessary (in case of subjects in other schools, you should submit audit application to the school.) コース科目は研究科の正規科目でもあるので、各自が所属する研究科で所定の履修登録手続き(他研究科の科目であれば、聴講願手続き)を完了しなければなりません。

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数	Semester 開講期	Day/ Time 曜・時限	* Year 履修年	Provided School/Department 提供部局・専攻
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Common Recommended Subject (2 Credits) / 共通推奨科目(2単位)

X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、山敷、松田	2	First Semester 前期	Thu/5 木/5		Interdisciplinary Graduate Courses 全学共通科目
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Compulsory Subjects (6 Credits) / 必修科目(6単位)

CC1	Socio-Environmental Energy Science I エネルギー社会・環境科学通論I	McLellan, others マクレラン ほか	2	First Semester (English in 2025)	Tue/1 火/1		Energy Science エネルギー科学
CC2	Socio-Environmental Energy Science II エネルギー社会・環境科学通論II	McLellan, others マクレラン ほか	2	First Semester (Japanese in 2025)	Thu/1 木1		Energy Science エネルギー科学
CC3	Field Research Project 学外実習プロジェクト	OHGAKI, others 大垣 ほか	2	First/Second Semester 前期/後期	TBD		Energy Science エネルギー科学

Common Elective Subjects and Elective Subjects (≥ 4 Credits)/ 共通選択科目及び選択科目(4単位以上)

Common Elective Subjects/ 共通選択科目							
XE2	Field Laboratories in Multi-Scale Earth Dynamics I 多階層地球変動科学実習I	YOSHIDA, SAKAZAKI, TANJI 吉田、坂崎、丹治	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中		Science 理学研究科
XE3	Meso-Scale Precipitation Systems and Severe Storms (Applied Meteorology IIA) メソ降水系・シビアストーム(応用気象学IIA)	TAKEMI, ITO 竹見、伊藤	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/4 月/4		Science 理学研究科

Elective Subjects/ 選択科目


Please submit this document via e-mail to C Course Prof. Hideaki Ohgaki <ohgaki.hideaki.2w@kyoto-u.ac.jp> as well as to <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> by the deadline to be announced.

この書類に記入し、所定の期日までにCコース大垣英明教授<ohgaki.hideaki.2w@kyoto-u.ac.jp> 及び <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> にお送り下さい。



# Educational Programme Subjects Application

## D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM) 持続的生物資源利用と生態系管理ユネスコチェアコース科目履修届

以下のとおり、コース科目履修届を提出します。

Registrant Info. 登録者情報

Name 氏名:			
Nationality 国籍:		Gender 性別:	<input type="checkbox"/> Male <input type="checkbox"/> Female
Graduate School 研究科:			
Depaartment 専攻:			
Master/Doctoral Programme 修士/博士 課程 (M1, M2, D1, D2, D3, D4, D5):			
Special Note: (Double Degree Programme, etc.) ダブルディグリーなど特記事項			
Entrance Year 入学・進学年度:			

History of revision 改訂履歴

First submission 初期登録:	YYYY/MM/DD
Revised (Ver. 2) 改訂(第2版)	YYYY/MM/DD
Revised (Ver. 3) 改訂(第3版)	YYYY/MM/DD
Revised (Ver. 4) 改訂(第4版)	YYYY/MM/DD

- Notes: 1. Fill in the green-coloured boxes. 記入するところは、「所属・氏名」欄、「改訂履歴」欄、「履修年」欄及び「選択科目」欄(緑色着色部分)です。  
2. \*Year should be 2020, 2021, etc to identify which year you will take or you have taken the subject. 履修する年(履修済みの場合は履修年)を「履修年」欄に記入して下さい。  
3. To take regular subjects, registration at your own school is necessary (in case of subjects in other schools, you should submit audit application to the school.)  
コース科目は研究科の正規科目でもあるので、各自が所属する研究科で所定の履修登録手続き(他研究科の科目であれば、聴講願手続き)を完了しなければなりません。

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数 相当	Semester 開講期	Day/ Time 曜・時限	* Year 履修年	Provided School/Department 提供部局・専攻
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Compulsory Subjects (6 Credits) / 必修科目 (6単位)

DC1	Tropical Agricultural Ecology 熱帯農業生態学特論	Higuchi, Kondo 樋口, 近藤	2	Offered biennially 隔年開講 Not offered in 2025 2025年度開講せず	集中		Agriculture 農学研究科
DC3	UNESCO Chair Field Work: Water, Forest and Society ユネスコチェアフィールドワーク: 水と森と社会	YAMASHIKI, NAITO, others 山敷, 内藤 ほか	2	Year-round 通年	Intensive 集中		Agriculture, GSAIS 農学、総合生存学館
X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、山敷、松田	2	First Semester 前期	Thu/5 木/5		Interdisciplinary Graduate Courses 全学共通科目

Compulsory Elective Subjects (≥ 2 Credits)/ 選択必修科目 (2単位以上)

DCE1	Special Lecture on Forest Hydrology 森林水文学特論	KOSUGI 小杉	2	Offered biennially 隔年開講 First Semester 前期 offered in 2025 2025年度開講	Intensive 集中		Agriculture 農学研究科
DCE2	Sustainable Agriculture: A Cross-Cultural Perspective	HSIANG	2	First Semester 前期	Thu/3 木/3		Agriculture 農学研究科
DCE3	Agriculture and Environment in Japan 日本の農業と環境	MIYAKE, SHINJO, KATAYAMA 三宅, 真常, 片山	2	First Semester 前期	Thu/2 木/2		Agriculture 農学研究科
DCE5	Water Resources Engineering 水資源利用工学	FUJIHARA, TAKEUCHI 藤原, 竹内	2	Offered biennially 隔年開講 Not offered in 2025 2025年度開講せず	Mon/2 月/2		Agriculture 農学研究科
DCE6	Integrated Forest to Coastal Management 森里海統合管理学	TOKUCHI, others 徳地 ほか	2	First Semester 前期	Thu/4 木/4		Global Environmental Studies 地球環境学舎

Common Elective Subjects and Elective Subjects (≥2 Credits) / 共通選択科目および選択科目 (2単位以上)

Common Elective Subjects/ 共通選択科目							
XE2	Field Laboratories in Multi-Scale Earth Dynamics I 多階層地球変動科学実習I	YOSHIDA, SAKAZAKI, TANJI 吉田、坂崎、丹治	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中		Science 理学研究科
XE3	Meso-Scale Precipitation Systems and Severe Storms (Applied Meteorology IIA) メソ降水系・シビアストーム(応用気象学IIA)	TAKEMI, ITO 竹見、伊藤	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/4 月/4		Science 理学研究科
Elective Subjects/ 選択科目							

Please submit this document via e-mail to D Course Assit. Prof. Daisuke Naito<naito.daisuke.3e@kyoto-u.ac.jp> as well as to <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> by the deadline to be announced.

この書類に記入し、所定の期日までにDコース内藤大輔助教<naito.daisuke.3e@kyoto-u.ac.jp> 及び <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp> にお送り下さい。





京都大学  
KYOTO UNIVERSITY

## Application for Certification of Previously Acquired Subjects

### 既修得科目認定申請書

To Chair Holder, UNESCO Chair WENDI,  
ユネスコチェア WENDI チェアホルダー 殿

Name  
申請者氏名 \_\_\_\_\_ (印)  
Graduate School  
研究科名 \_\_\_\_\_  
Student ID No.  
学生番号 \_\_\_\_\_  
Course of WENDI  
WENDI コース \_\_\_\_\_

I hereby request that the WENDI-HESD Programme acknowledges the subject(s) which I already completed at my graduate school in previous semester(s).

既に修得した下記の科目を、ユネスコチェア WENDI-HESD プログラムの科目として認定いただきたく、申請します。

Subjects 科目	Acquisition Year 修得年度	Credits 単位数	Notes 備考

Max. numbers of credits to be acknowledged for each course are as below. 各コースにおいて認定できる最大単位数は以下のとおりです。

A: up to 4 B: up to 5 C: up to 4 D: up to 4

※Please refer to V.(1) on Page 7 in the Guideline of Registration. 登録要覧の7ページ目 V. (1)をご参照ください。

Please attach your academic transcript issued by your graduate school. 所属研究科発行の成績証明書を添付してください。

Please submit this form to your course professor as well as to <secretariat\_wendi@mail2.adm.kyoto-u.ac.jp>.

この書類をコース担当教員と secretariat\_wendi@mail2.adm.kyoto-u.ac.jp へご提出ください。



京都大学  
KYOTO UNIVERSITY

**Request for Certificate of  
Higher Education and Research for Sustainable Development (HESD) Programme,  
UNESCO Chair WENDI, Kyoto University  
修了証交付願**

To Chair Holder, UNESCO Chair WENDI,  
ユネスコチェア WENDI チェアホルダー 殿

As I have fulfilled all the requirements necessary for completion of the HESD Programme of UNESCO Chair WENDI at Kyoto University, please accept the request and issue the Certificate of the HESD Programme.

私は京都大学ユネスコチェア WENDI が提供する持続可能な開発のための教育(HESD)プログラムの所定の履修要件を満たしましたので、修了証の発行をお願いします。

Student ID No.

学生番号

Name

申請者氏名

Supervisor's Name

指導教員名

㊞

㊞

Please write your name in alphabet as you want it to appear on your certificate.

Please fill in this document and submit the scanned copy via e-mail to [secretariat\\_wendi@mail2.adm.kyoto-u.ac.jp](mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp).

この書類に記入し、スキャンコピーを [secretariat\\_wendi@mail2.adm.kyoto-u.ac.jp](mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp) にお送り下さい。

Please attach ①“Educational Programme Subjects Application” (final updated) form and ②your academic transcript issued by your graduate school. ①科目履修届（最終更新版）②所属研究科発行の成績証明書を添付してください。

This document can be downloaded from the website of WENDI.




京都大学  
KYOTO UNIVERSITY

**Request form to withdraw from  
Higher Education and Research for Sustainable Development (HESD) Programme,  
UNESCO Chair WENDI, Kyoto University  
辞退願**

I would like to withdraw from the HESD Programme of UNESCO Chair WENDI, Kyoto University.

京都大学ユネスコチェア WENDI が提供する持続可能な開発のための教育(HESD)プログラムを辞退いたします。

Your course (Please check one) コース (1箇所には✓を入れる)	A. Water Resources and Disaster Management Course (WRDM) 水資源マネジメント・水防災ユネスコチェアコース
	B. Aquatic Environment & Water Quality Course (AEWQ) 水環境・水質ユネスコチェアコース
	C. Global Energy and Environment Course (GEEC) エネルギー科学ユネスコチェアコース
	D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM) 持続的生物資源利用と生態系管理ユネスコチェアコース
	F. Course for Creating Resilient Societies (CRS) レジリエント社会創造ユネスコチェアコース
Name 名前 (Please print)	in Roman characters ローマ字表記
Student ID No. 学生番号	
Reason(s) for your decision to withdraw 辞退理由	
Name of the academic Supervisor 指導教員名	Signature or Seal 署名及び印 
Please submit the scanned copy of this document via e-mail to <b>secretariat_wendi@mail2.adm.kyoto-u.ac.jp</b> within one month from your decision to withdraw from the Programme. この書類に記入し、スキャンコピーを辞退の意志決定後1ヶ月以内に <b>secretariat_wendi@mail2.adm.kyoto-u.ac.jp</b> にお送り下さい。	

This document can be downloaded from the website of WENDI

## 8. Contact Information 問い合わせ先

### Office of WENDI

Address:

Higashi Ichijokan, 1 Yoshida-Nakaadachi-cho, Sakyo-ku, Kyoto 606-8306, Japan

Email: [secretariat\\_wendi@mail2.adm.kyoto-u.ac.jp](mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp)

Website: <http://wendi.kyoto-u.ac.jp/>

### ユネスコチェア事務室

所在地 〒603-8306 京都市左京区吉田中阿達町 1 番地 京都大学東一条館

メール: [secretariat\\_wendi@mail2.adm.kyoto-u.ac.jp](mailto:secretariat_wendi@mail2.adm.kyoto-u.ac.jp)

ホームページ: <http://wendi.kyoto-u.ac.jp/>

## **APPENDIX 付録**

### **I. HESD Subjects List**

### **II. UNESCO-IHP Training (To be Announced)**



APPENDIX I

UNESCO Chair WENDI  
HESD Subjects List

Courses コース名
A. Water Resources and Disaster Management Course (WRDM) 水資源マネジメント・水防災ユネスコチェアコース
B. Aquatic Environment and Water Quality Course (AEWQ) 水環境・水質ユネスコチェアコース
C. Global Energy and Environment Course (GEEC) エネルギー科学ユネスコチェアコース
D. Sustainable Bioresource Utilization and Ecosystem Management Course (SBM) 持続的生物資源利用と生態系管理ユネスコチェアコース

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数 相当	Semester 開講期	Day/ Time 曜・時限	Provided School/Department 提供部局・専攻
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Common Recommended Subject/ 共通推奨科目

X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、 山敷、松田	2	First Semester 前期	See p. 5 Thu/5	Interdisciplinary Graduate Courses 全学共通科目
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Common Elective Subjects/ 共通選択科目

XE2	Field Laboratories in Multi-Scale Earth Dynamics I 多階層地球変動科学実習I	YOSHIDA, SAKAZAKI, TANJI 吉田、坂崎、丹治	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中	Science 理学研究科
XE3	Meso-Scale Precipitation Systems and Severe Storms (Applied Meteorology IIA) メソ降水系・シビアストーム(応用気象学IIA)	TAKEMI, ITO 竹見、伊藤	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/4 月/4	Science 理学研究科

Compulsory Subjects / 必修科目

AC1	UNESCO-IHP Training ユネスコIHP(国際水文学計画)研修	SUMI, HORI, others 角、堀 ほか	2	Second Semester 後期	Intensive 集中 11/28- 12/8	DPRI 防災研究所
AC2	Field Exercise フィールド実習  One of below subjects is recognized as Field Exercise  - Self Planning Project 自主企画 - Capstone Project キャップストーンプロジェクト - Practice in Advanced Infrastructure Engineering A, B 社会基盤工学総合実習A, B - Practice in Advanced Urban Management A, B 都市社会工学総合実習A, B - Internship for Human Security Engineering 人間安全保障工学インターンシップ	Related faculty 関係教員	2	Year-round 通年	N.A.	Engineering 工学研究科
X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、 山敷、松田	2	First Semester 前期	Thu/5 木/5	Interdisciplinary Graduate Courses 全学共通科目
BC1	Global Survivability Risk Management 地球生存リスク特論	YAMASHIKI 山敷	2	Second Semester 後期	Wed/3 水/3	GSAIS 総合生存学館
BC2	Earth, the Water Planet 水惑星地球	YAMASHIKI 山敷	2	First Semester 前期	Wed/3 水/3	GSAIS 総合生存学館
BC3	UNESCO Chair Field Work: Water, Forest and Society ユネスコチェアフィールドワーク: 水と森と社会	YAMASHIKI, NAITO, others 山敷、内藤 ほか	2	Year-round 通年	Intensive 集中	Agriculture, GSAIS 農学、総合生存学館
CC1	Socio-Environmental Energy Science I エネルギー社会・環境科学通論I	MCLELLAN, others マクレラン ほか	2	First Semester (English in 2025)	Tue/1 火/1	Energy Science エネルギー科学
CC2	Socio-Environmental Energy Science II エネルギー社会・環境科学通論II	MCLELLAN, others マクレラン ほか	2	First Semester (Japanese in 2025)	Thu/1 木1	Energy Science エネルギー科学
CC3	Field Research Project 学外実習プロジェクト	OHGAKI, others 大垣 ほか	2	First/Second Semester 前期/後期	TBD	Energy Science エネルギー科学
DC1	Tropical Agricultural Ecology 熱帯農業生態学特論	HIGUCHI, KONKDO 樋口、近藤	2	Offered biennially 隔年開講 First Semester Not offered in 2025 2025度開講せず	集中	Agriculture 農学研究科
DC3	UNESCO Chair Field Work: Water, Forest and Society ユネスコチェアフィールドワーク: 水と森と社会	YAMASHIKI, NAITO, others 山敷、内藤 ほか	2	Year-round 通年	Intensive 集中	Agriculture, GSAIS 農学、総合生存学館
X01	Global Survivability Studies グローバル生存学	TACHIKAWA, FUJII, SAYAMA, MCLELLAN, KATSURA, YAMASHIKI, MATSUDA 立川、藤井、佐山、マクレラン、桂、 山敷、松田	2	First Semester 前期	See p. 5 Thu/5	Interdisciplinary Graduate Courses 全学共通科目

Subject Code 科目コード	Subject Name コース科目名	Instructors 担当教員	Credits 単位数 相当	Semester 開講期	Day/ Time 曜・時限	Provided School/Department 提供部局・専攻
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Compulsory Elective Subjects / 選択必修科目

DCE1	Special Lecture on Forest Hydrology 森林水文学特論	KOSUGI 小杉	2	Offered biennially 隔年開講 First Semester 前期 Offered in 2025 2025年度開講	Intensive 集中	Agriculture 農学研究科
DCE2	Sustainable Agriculture: A Cross-Cultural Perspective	HSIANG	2	First Semester 前期	Thu/3 木/3	Agriculture 農学研究科
DCE3	Agriculture and Environment in Japan 日本の農業と環境	MIYAKE, SHINJO, KATAYAMA 三宅, 真常, 片山	2	First Semester 前期	Thu/2 木/2	Agriculture 農学研究科
DCE5	Water Resources Engineering 水資源利用工学	FUJIHARA, TAKEUCHI 藤原, 竹内	2	Offered biennially 隔年開講 First Semester 前期 Not offered in 2025 2025年度開講せず	Mon/2 月/2	Agriculture 農学研究科
DCE6	Integrated Forest to Coastal Management 森里海統合管理学	TOKUCHI et al. 徳地 ほか	2	First Semester 前期	Thu/4 木/4	GSGES 地球環境学舎

Elective Subjects / 選択科目

BE1	Watershed Water Environment Management 流域水環境管理論	ECHIGO, TANAKA 越後、田中	1	First Semester 前期	Tue/1 火/1	GSGES 地球環境学舎
BE2	Environmental Risk Analysis 環境リスク学	MATSUDA, others 松田 ほか	2	First Semester 前期	Wed/4 水/4	Engineering 工学研究科
BE3	Water Sanitary Engineering 水質衛生工学	ITO, KOSAKA 伊藤、小坂	2	First Semester 前期	Tue/2 火/2	Engineering 工学研究科
BE4	Introduction to Green Chemistry グリーンケミストリー(環境に優しい化学)入門	SAITO 齋藤	2	Second Semester 後期	Thu/4 木/4	GSAIS 総合生存学館
BE5	Space Medicine The Study of the effects on human during space staying 有人宇宙医学	YAMASHIKI, TERADA 山敷、寺田	2	Second Semester 後期	Wed/4 水/4	GSAIS 総合生存学館
BE6	Advanced Studies Harmonizing Disaster Management and Environmental Conservation 環境防災生存学特論	YAMASHIKI, YAMORI 山敷、矢守	2	First Semester 前期	Wed/4 水/4	GSAIS 総合生存学館