AIMS-HU
Information Package

広島大学

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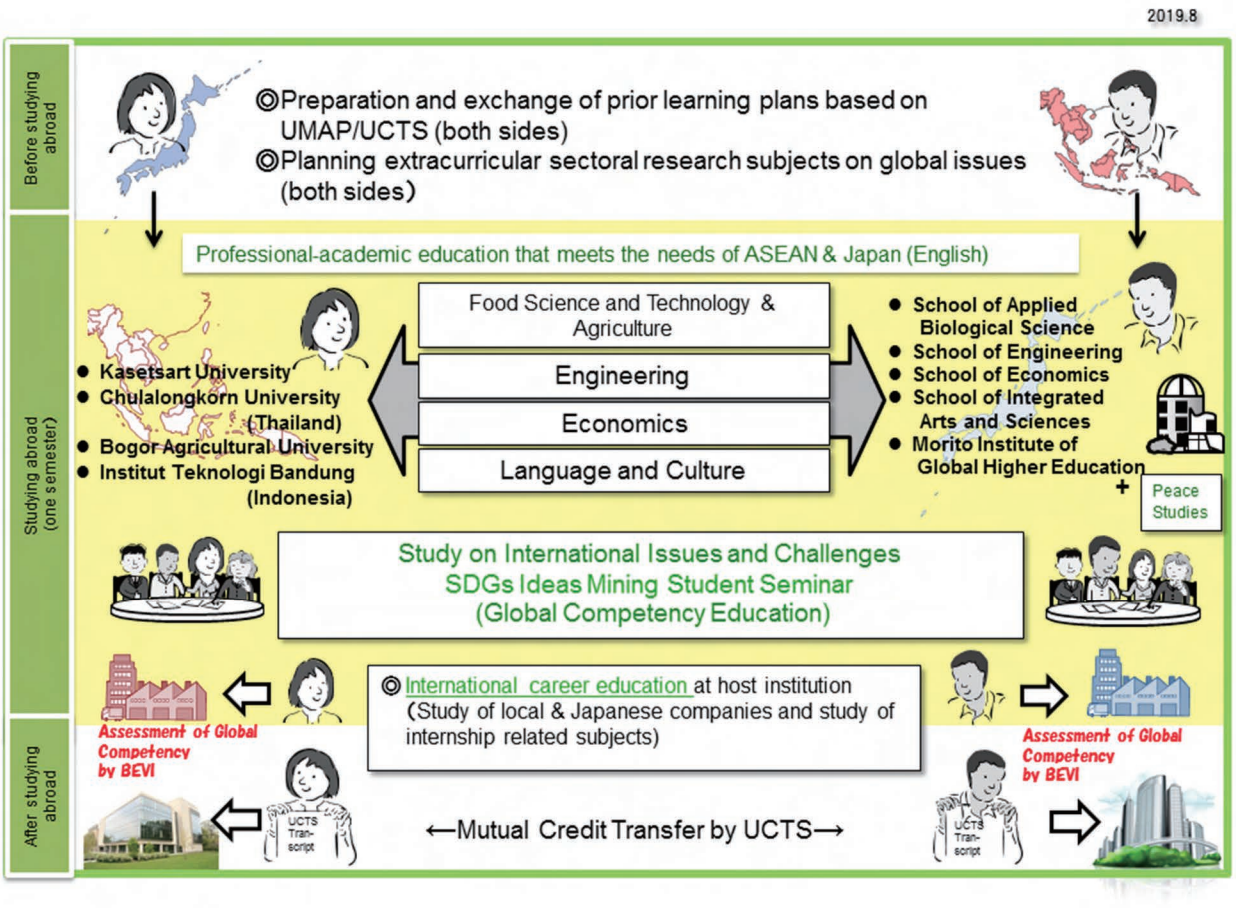
Message from the AIMS-HU Program

Welcome to the AIMS-HU (Asian International Mobility for Student - Hiroshima University) Program at Hiroshima University. Hiroshima University is one of the top-leading national universities in Japan. Our AIMS-HU Program, started in 2013, provides you very advanced scholarly education in the three disciplines of agriculture/food science, economics, and engineering with very dedicated and well-qualified professors from the faculties. We hope that the AIMS-HU Program will help to educate future talented workforce, innovative leaders, problem solvers and visionaries necessary for a progressive and rewarding Asian region in the 21st century. Thus, we take our role seriously and prepare our AIMS-HU students for future careers and advanced scholarly pursuits in an increasingly globalized environment. Without a doubt, the AIMS-HU Program will offer you an unforgettable experience that may change your life. We look forward to your participation.

HOTTA Taiji, Ph.D.
Director of the AIMS-HU Program
Professor, Morito Institute of Global Higher Education
Hiroshima University



Asian International Mobility for Students (AIMS) Program

The AIMS-HU Program

Core-Human Resource Education Program for Economic Development, Trust-building, and Peace in Asia (CHREA)

Objectives

Based on our principles, Hiroshima University offers advantages of educational and research resources in each academic discipline. The AIMS-HU program will educate a "Core-Human Resource", which will establish "peace" with mutual trust and co-economic development in Asia, by enhancing the level of cross-cultural understanding among all participating students.

Program Outline

The AIMS-HU program is designed to provide three different areas of professional education under the AIMS program, these are; (1) Food Science and Technology & Agriculture, (2) Engineering, and (3) Economics. It will also promote the cross-cultural understanding mentioned above through discussions in Japanese-style seminar classes and the SDGs Ideas Mining Student Seminar for all participating students.

The AIMS-HU program strives to offer students the ability to incorporate their academic activities at Hiroshima University into their studies toward a degree, by obtaining credits which can be transferred to their home institutions.

The AIMS-HU program promotes the participants' academic pursuits by integrating exchange students into university education alongside Japanese students. Studying in Japan gives students an opportunity to directly experience life and society of the country, thereby expanding their cultural understanding.

Inviting a diverse group of international students to participate in undergraduate programs not only enriches the life of those experiencing Japan for the first time, but also provides opportunities for Japanese students to communicate with those from abroad.

Five Guiding Principles of Hiroshima University

- **Pursuit of Peace**
- **Creation of New Knowledge**
- **Education to Cultivate Humanity with Enriched Spirit**
- **Coexistence with Regional and international Community**
- **Continuous Transformation of Self and Consciousness**

Hiroshima University in figures

(As of Nov. 1, 2019, *as of May 1, 2019)

Enrollment	Number
Undergraduate Students	10,642
Graduate Students	4,584
Academic Faculty Members	1,794*
Non-Academic Staff Members	1,682*
International Students	2,116 (71 countries)

General Information

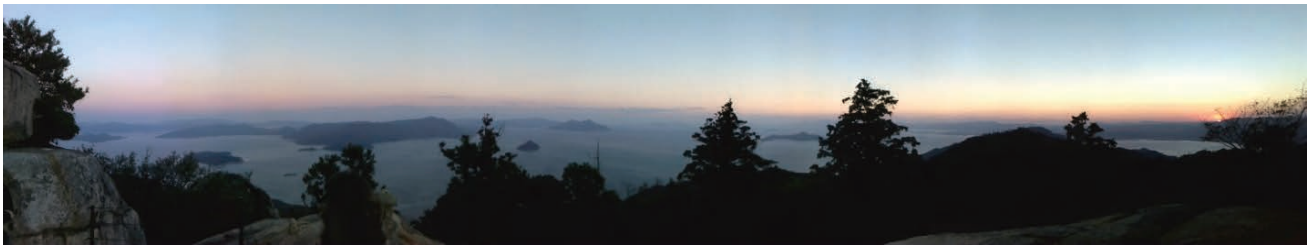
Hiroshima Prefecture and Hiroshima City

Hiroshima Prefecture is situated in Western Japan on the coast of the Seto Inland Sea in an environment richly endowed with natural resources and scenic beauty. The sea, which yields fish, oysters, and seaweed is the foundation of a vibrant local marine economy. The northern part of the prefecture, dominated by the Chugoku Mountain Range, is characterized by small towns and farming villages, offering many kinds of traditional entertainment such as "Kagura" (sacred Shinto music and dance). The region is also renowned for its large variety of agricultural products including oranges and persimmons. The prefecture's diverse climate allows for the enjoyment of many seasonal sports.

Located in the western part of Hiroshima prefecture facing the Seto Inland Sea, Hiroshima City is an energetic and thriving metropolis. Despite being the victim of the first atomic bomb in 1945, recent years have seen the city prosper with remarkable industrial development. As a result, the population has increased to over 1 million inhabitants. Today's Hiroshima has flourished to such an extent that little evidence remains of the atomic bomb tragedy. It is not surprising that Hiroshima City has become one of the worlds' leading centers for Peace Studies and one of the major campaigners for the abolition of nuclear weapons.

Higashi-Hiroshima City

With the relocation of Hiroshima University, Higashi-Hiroshima City transformed from an isolated Japanese town into a modern "campus city." Higashi-Hiroshima City is situated in a basin about 30 km east of Hiroshima City in a beautiful natural area that has long been famous for the brewing of *sake*, Japanese rice wine. The neighboring town of Saijo has all the big city amenities while keeping its rural appeal. Every October, Saijo holds the *Sake Matsuri* (lit. Rice Wine Festival), an energetic festival celebrating the area's long history of sake brewing. Higashi-Hiroshima and Saijo provide a beautiful place to study while catering to all the needs of the university students.



Hiroshima University

Before the Second World War, educational facilities in Hiroshima comprised of the Hiroshima University of Literature and Science (Founded in 1929), Hiroshima Higher Normal School (Founded in 1902), Hiroshima Women's Higher Normal School (Founded in 1945), Hiroshima Normal School (Founded in 1874) and Hiroshima Normal School for Youth (Founded in 1944). Hiroshima city was, and still is, with Tokyo, one of the principal centers of teacher-training and educational research in Japan. In addition to these institutions, the Hiroshima Higher School (Founded in 1923), the Hiroshima Higher Technical School (Founded in 1920) and the Hiroshima Municipal Higher Technical School (Founded in 1945) were also located in Hiroshima and contributed to training in various fields.

When the post-war educational reforms began, these schools were integrated with the Hiroshima University of Literature and Science as its center, and in 1949, they began life afresh as the new National Hiroshima University. In addition, in 1952, the Hiroshima Prefectural Medical College was integrated with Hiroshima University making the University a truly comprehensive university.

Presently, Hiroshima University consists of 12 schools; Integrated Arts and Sciences, Letters, Education, Law, Economics, Science, Medicine, Dentistry, Pharmacy, Engineering, Applied Biological Science, Infomatics and Data Science, and 4 graduate schools, a research institute, research facilities and affiliated hospitals. Hiroshima University is one of the biggest National Universities in Japan, with an enrollment of about 16,000 students.

The University used to have several campuses in various parts of the prefecture. In 1973, the ground-breaking decision was made: bringing the campuses together.
The construction for the new campus started in 1979. The first of the faculties that was relocated to the new campus was the Faculty of Engineering. This move was made in March of 1992. After that, seven other faculties have moved to the new Higashi Hiroshima Campus, leaving only the faculty of Medicine and the Faculty of Dentistry in Hiroshima City.

As higher education in Japan is currently undergoing great reform, Hiroshima University is striving hard to secure its place among the top universities in Japan and pursue its five guiding principles: - the pursuit of peace, the creating of new forms of knowledge, nurturing well-rounded human beings, collaboration with the local, regional and international community and continuous self-development. Hiroshima University is selected as one of Japan's 13 Top Global Universities in December 14, 2014 and has been working to become the globally competitive university in research and education.

Academic Program

AIMS-HU Program offers two types of courses: **Three areas of Professional Education** and **Common Courses**. Participating students will take the designated number of professional courses in each field that they are participating in, and common courses such as “Study on International Issues and Challenges” (including participation in the SDGs Ideas Mining Student Seminar), and “Study on Japanese Companies and Social Entrepreneurship” following instructions of their affiliated school.

Main Features of the AIMS-HU Program*

1. Three Areas of Professional Education (Instruction in English)

Field	Theme	School
1. FOOD SCIENCE AND TECHNOLOGY & AGRICULTURE	Food Production and Safety Management, including Bio-Resource Production	School of Applied Biological Science
2. ENGINEERING	Engineering for “MONOZUKURI” (Japanese Style Manufacturing)	School of Engineering
3. ECONOMICS	Stable Market and Economic Policies in Asia	School of Economics

2. Common Courses (Instruction in English)

[To be taken by the instructions of the school that students participate in]

Field	Theme	Institute
(1) Study on International Issues and Challenges	Develop students’ independent research capacity in their own fields of study	Morito Institute of Global Higher Education
(2) Study on Japanese Companies and Social Entrepreneurship	Field Study at Japanese Companies and Organizations	
(3) Japanese Culture and Peace	Influence of 4 Ideologies in Modern Japan and Peace Study	
(4) Japanese Language	5 levels of Japanese language education (from beginner to advanced) - Instructed in English for beginner and elementary levels only.	

*Notes: - *Course details are subject to change.*
- *Enrollments in optional courses are not guaranteed.*

Other Courses: There are other undergraduate courses offered in English which international students are allowed to take. In addition, if your Japanese proficiency level is advanced, you can take undergraduate courses taught in Japanese with Japanese students offered in each school. Please consult with the lecturer on whether you are eligible to take his or her class. Please ask your tutor to assist you to find the courses you are interested in. For the syllabus, please refer to the website **Momiji** (Student Information System).

Student Status and Credit Requirements

1. Japanese Immigration Law requires students to take classes for 10 hours per week in order to receive College Student visa. Those who are admitted into the AIMS-HU program will have the status as "**Special Auditing Students** (*tokubetsu choukou gakusei*)" and are eligible to take credits during their stay at Hiroshima University.

2. AIMS-HU requires **Special Auditing Students** to successfully complete the equivalent of **14 to 17 credits** per semester. The required number of credits which they have to take vary depending on the school.

3. Whether or not the credits obtained at Hiroshima University can be transferred to the program in the students' home institution is up to the decision of their home institution. Students should check with their home institution about credit transfer and course load requirements.

Academic Year

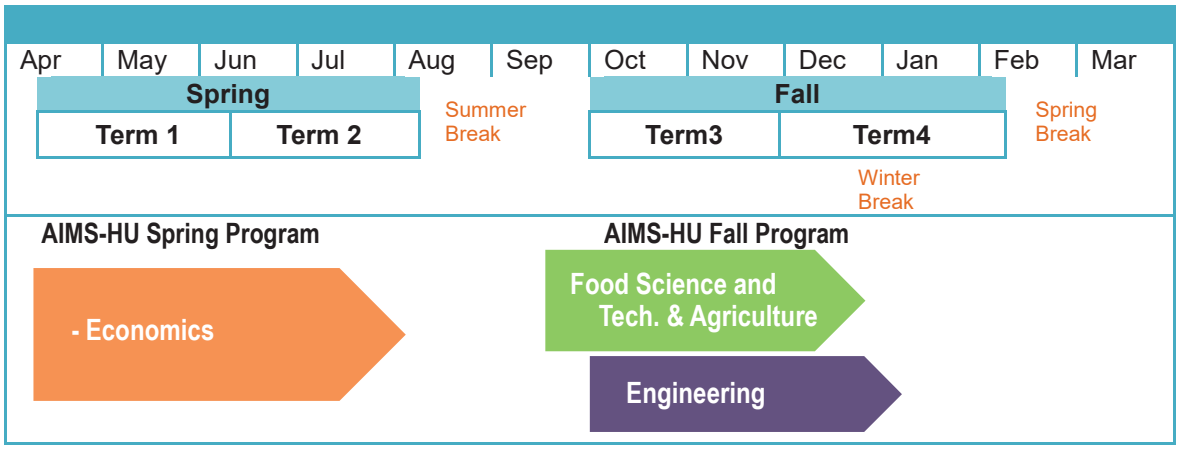
At Hiroshima University, the academic year is divided into 4 Terms*. The AIMS-HU exchange students can only stay for two terms (a semester) either from April to August (Spring Program), or September to December or October to January (Fall Program). As the college student visa is valid for 6 months, extension of stay at Hiroshima University beyond 6 months is not possible.

Term 1: April 8 - June 8
Term 2: June 9 - August 5
Term 3: October 2 – November 30
Term 4: December 1 - February 5

Summer Break: August 6 - October 1
Winter Break: December 28 - January 5
Spring Break: February 6 - April 7

*Notes:
- All the dates above are subject to change.
- Some courses may follow the semester system
- Part of AIMS-HU Program does not follow Hiroshima University's standard calendar.

Academic Year and AIMS-HU Calendar



Credit System (UCTS)

Hiroshima University is actively promoting the use of the UMAP (University Mobility in Asia and the Pacific) Credit Transfer Scheme or UCTS in student exchanges. UMAP is a voluntary association of governmental and non-governmental representatives of the higher education (university) sector in the Asia-Pacific region, which aims at promoting the mobility of university students and staff members and international cooperation for it. In May 2013, UCTS was revised based upon a concept of Asian Academic Credits （AACs）which allows all Asian universities convert academic credits on a one to one basis among themselves.

Moreover, in November 2018, the concept of AACs (=UCTS) was adopted as a part of guidelines for regional student mobility among universities by the ASEAN* plus Three** Ministers of Education. Thus, UCTS has become an official aligned credit transfer system among 13 nations

(Note) *10 ASEAN member states are Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, The Philippines, Singapore, Thailand and, Vietnam); **"Plus Three" nations are China, S. Korea and Japan.

The definition of UCTS introduced from January 2014 is as follows:

One (1) UCTS = 38-48 hours of student workload.

This includes 13-16 academic hours of instruction.

One UCTS point (one credit at Hiroshima University) can be converted as roughly 1.0 credit in many American universities, roughly 1.5 ECTS in European universities and 3.0 credits under the Credit Accumulation and Transfer Scheme (CATS) in British institutions.

The Japanese government defines **ONE credit in Japan** as equivalent to **45 hours of workload**, which includes 15-30 hours of lectures and exercises, or 30-45 hours of experiments, practical training, and skills practice. Since one credit at Hiroshima University is based upon this government regulation, our one credit will be within the range, which the UCTS concept uses.

Thus, one credit at Hiroshima University is equivalent to one UCTS point.

Moreover, it has the potential to promote student mobility not only among higher education institutions in the Asia-Pacific region, but also in other parts of the world. This simple and systematic measurement tool to count academic credits will provide a unified credit transfer system in various regions.

[AN EXPLANATION ON A GRADING SYSTEM]
As for the grading system at our university, all courses, including Japanese language and culture courses, are graded on a scale using 5 distinctions (S, A, B, C, and D). This 5 level-grading policy is the same as the UCTS grading policy at Hiroshima University.

Hiroshima University	Grade	UCTS	Scale* (%)
S Excellent	100-90	A Excellent	10
A Very good	89-80	B Very good	25
B Good	79-70	C Good	30
C Satisfactory	69-60	D Satisfactory	25
D Fail	59-0	F Fail	10
No equivalent at Hiroshima University		E Sufficient	-
		FX Fail	-

* *Successful students normally achieving grade*

BEVI (Beliefs, Events, and Values Inventory)

Study Abroad Impacts

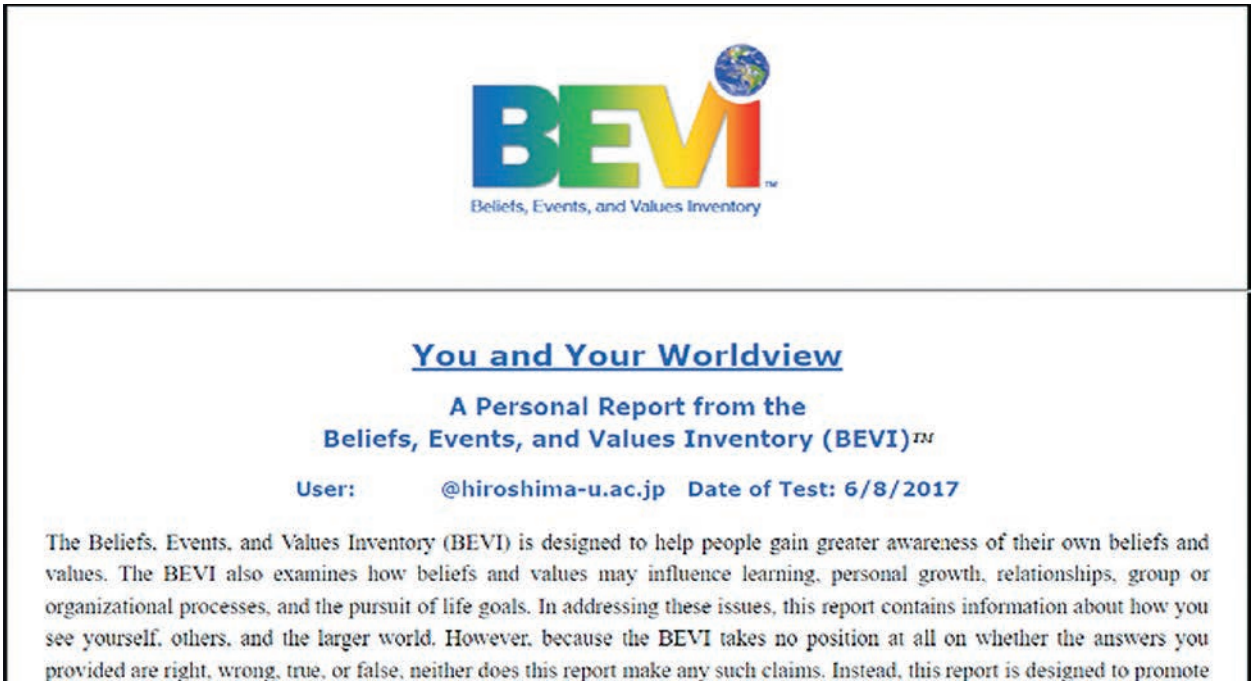
No one denies that study abroad experiences have a significant impact on our views, attitudes, values, and beliefs about the world. People are, however, not so sure about exactly "who learns what and why, and under what circumstances," which ultimately leads to how the person changes as a result of the experience. We believe that answering these questions will not only allow us to design better programs but also help YOU reflect on and understand yourself as an individual, that is, *who you are.*

BEVI Test

To that end, Hiroshima University has been using the BEVI (Beliefs, Events, and Values Inventory) test —a sophisticated psychological (online) test developed by a team of American psychologists—trying to evaluate and understand students' learning processes during their study abroad while at the same time facilitating students' personal growth and development. All AIMS-HU exchange students are required to take the BEVI test soon after they arrive in Japan as well as right before they leave Japan.

BEVI Benefits

What is great about the BEVI test is each student electronically receiving an *individually customized* report right after completing the test, based upon their unique responses to the BEVI scales. The report is quite detailed and allows you to develop a much clearer understanding of yourself, particularly regarding some aspects that have never been made explicit in your life.


Beliefs, Events, and Values Inventory

You and Your Worldview

A Personal Report from the
Beliefs, Events, and Values Inventory (BEVI)™

User: @hiroshima-u.ac.jp Date of Test: 6/8/2017

The Beliefs, Events, and Values Inventory (BEVI) is designed to help people gain greater awareness of their own beliefs and values. The BEVI also examines how beliefs and values may influence learning, personal growth, relationships, group or organizational processes, and the pursuit of life goals. In addressing these issues, this report contains information about how you see yourself, others, and the larger world. However, because the BEVI takes no position at all on whether the answers you provided are right, wrong, true, or false, neither does this report make any such claims. Instead, this report is designed to promote

Course Descriptions

COMMON COURSES

Study on International Issues and Challenges (3 credits)

This is a 3-credit course taught in English, in which students will address issues of global significance in their own fields of study. The course is primarily designed for AIMS undergraduate exchange students on a term long (or longer) program, but also open to graduate exchange students of all fields. One of the main goals of this course is to develop students' independent research capacity. Students will receive professional support from our faculty members in every stage of research development. Another goal is to improve students' presentation skills. Students will receive detailed guidance from the course instructor(s) on how to deliver an effective, easy-to-understand oral presentation, using visual aids such as PowerPoint slides.

Study on Japanese Companies and Social Entrepreneurship (2 or 3 credits)

This course gives an overview of the United Nations Sustainable Development Goals (SDGs) and introduces some Japanese companies and organizations (including NPOs) taking interesting and innovative approaches for building a peaceful, inclusive, and sustainable society. We will analyze and discuss the characteristics as well as challenges of these companies and organizations by paying particular attention to some key concepts such as social entrepreneurship that has gained increasing prominence in recent years. This course includes site visits to some of the Japanese companies and organizations headquartered in Hiroshima. Students can earn 2-3 credits for the course, with an additional credit option.

Japanese Culture and Peace (2 or 3 credits)

This course focuses on the Japanese culture and basic patterns of Japanese communication at various situations and relationships. It also studies the basic concept of "Peace" by visiting A-bomb sites and reading some documents whereby students will learn about the experience of Hiroshima as a victim of the atomic bomb and its approach to peace studies. The instructor mainly will deal with Japanese culture and communication patterns, but students are expected to study the subject from a comparative aspect, reflecting upon the patterns of human behaviors in their own region and culture. Students are expected to write a short research paper with a relevant topic. Students can register for 2-3 credits, with an additional credit option.

Japanese Language [Optional]

English is used for instruction in the introductory Japanese level only.
Students who wish to enroll in Japanese Language courses offered by Morito Institute of Global Higher Education must complete the registration form and take a placement test in advance.

Theme：Five levels (from introductory to advanced) of Japanese language education
Institute：Morito Institute of Global Higher Education

Course Title	Outline	Credits
Introductory Japanese	Aim of this course is to read and write kana (the phonetic syllabaries) and basic kanji (Chinese characters), and to familiarize them with rudimentary grammar.	
Elementary Japanese	Student will learn basic expressions and vocabulary at the elementary level, and will improve their practical ability of expression in Japanese in various situations. The completion of this class will be roughly equivalent to two years of Japanese language education in a typical foreign university.	1 to 8
Intermediate Japanese	The objectives of three classes are to give students the ability to read long compositions at intermediate level, gain sufficient reading comprehension to understand reliably what those texts try to convey and also foster the ability to express accurately what the content of those texts means and to gain listening comprehension of the text on various topics and learn related expressions and vocabulary.	1 to 8
Upper-Intermediate Japanese	The objectives of three classes are to cultivate students' reading skills of long compositions and to instill knowledge of intermediate level grammar, vocabulary and expressions in students. In addition, the course also focuses on: (1) understanding of Japanese culture and society by discussing topics in daily life; (2) enriching vocabulary by dealing with various daily scenarios and situations, and (3) developing overall Japanese language skills through various language exercises.	1 to 8
Advanced Japanese	The series of courses focus on the advanced level of Japanese language education. Each class has a specific purpose to teach Japanese language, literature, and culture.	1 to 12

FOOD SCIENCE AND TECHNOLOGY & AGRICULTURE

Fall (Term 3 & 4)

Full of experiences to meet biosphere sciences and Japan!

Curriculum Features

- Total 10 elaborated courses, covering from bio-resource productions (fisheries, agriculture, livestock breeding), through food processing and control standards, up to the distribution and transport chains and consumptions, all necessary for ensuring high quality and safe foods while contributing sustainable development throughout Asia.
- 3 credits for each course, combining a classroom lecture and field or laboratory practice, providing opportunities to learn not only from books but from fields.
- Have opportunities to practice in the modern laboratories, faculty farm, crop field and on the research ship.
- Faculty own unique programs, for learning Japanese language and culture.
- Providing a student room for AIMS student cluster.
- And many more for your valuable stay in Hiroshima

Courses

**The course information below is based on the data of February, 2017. The course available for each academic year and the details of each course could be changed. Please refer to the AIMS-HU Web page for the updated information.*

01 Global Environmental Issues and Management (3 credits)

This course provides an overview of some global environmental issues through lectures and class discussions, supplemented by site visits. The recurring theme of "Think Globally, Act Locally" is emphasized throughout the course. Issues affecting humans and the environment particularly around Southeast Asia are discussed ranging from human population and resource management to broader issues as environmental ethics and philosophy. The course aims to promote a more responsible and responsive global citizenry among students.

02 Animal Science and Technology (3 credits)

The lecture consists of animal breeding, feeding and reproduction in livestock production systems. Students also have field practice in the university farm and Hiroshima Prefectural Livestock Technology Research Center.

03 Physiology of Field Crop Production (3 credits)

The objective of this course is to gain a fundamental understanding on physiological processes in crop growth and development, plant adaptations to environmental stresses, and soil fertility and soil management. Students will have an opportunity to learn plant and soil analysis through laboratory works/demonstrations and to join the study tour to the rural agricultural farms and experimental stations.

04 Insect Science (3 credits)

The lecture consists of; taxonomy, evolution, morphology, physiology, life history and ecology of insects, the impacts of human activity on insect communities, mass emergence of insects as a nuisance and utilization of insects to industry. Students also experience insect sampling in the field, microscopic observation, species identification and sketch and description.

05 Modern Food Science (3 credits)

The lecture consists of; i) marine products in Japan (overview) and marine bioresource chemistry, ii) molecular nutrition, iii) physiological function of foods, iv) food hygiene (microbial and food poisoning control), and v) food engineering and processing. Students also experience one or two days research tour to local food companies.

06 Molecular-Level Understanding of Functionality of Foods (3 credits)

The lecture begins with the review of multiple significances of nutrients from a view point of evolution of life, mammals and brain, so that the audience can have a comprehensive understanding of the significances of foods for evolution of humans. Then, we discuss how food resources have been discovered and developed on this planet during several thousands of years of the history of humans. The basic understanding of digestion and absorption of nutrients will then be discussed in combination with chemical biology and physical chemistry of food materials. As the final subjects, the relationships between the functionality and structures of food materials together with up-to-date research of food nanotechnology will be discussed.

For experimental exercise, Micro-structures of chocolate, mayonnaise, margarine will be produced and also measured its physicochemical properties by using scanning electron microscopy, X-ray diffraction and thermal calorimeter etc.

07 Fish Production (3 credits)

The lecture consists of; biology, behavioral ecology, culture and pathology of important fish resources in Japan. Students also experience various experimental trainings at professors' laboratories to deepen understanding of the methodology of fisheries science.

08 Plankton Biology (3 credits)

The lecture consists of; biology and ecology of shellfishes and other benthic organisms, biology of macro- and micro-algae, and cultures of these aquatic resources in Japan. Students also experience one or two days trip to the related aquaculture facilities nearby and two days cruise in a research vessel (Toyoshio-Maru, 256GT).

09 Introductory Physiology of Domestic Animals (3 credits)

This class will deal with the physiology of domestic animals to produce healthy milk, meat and eggs. Practical experiments such as anatomy of ruminants and chicken and other analytical training will be also planned. The understanding of mechanisms and functions in domestic animals leads to an appropriate animal management.

10 Resource Management (3 credits)

11 AIMS Nihongo and Bunka Class (no credit)

This class provides you many opportunities to meet Japanese culture and language. You will learn Japanese language step by step and have actual experiences thorough various kinds of Japanese culture.

Message from the School of Applied Biological Science

KOIKE Kazuhiko, Ph.D.
Academic Advisor
School of Applied Biological Science
Research Fields: Plankton Ecology

The Asian food system which configures an effective scheme starting from food production through processing until consumption has grown in importance hand in hand with emerging huge markets throughout Asia. The Faculty of Applied Biological Science of Hiroshima University is a unique faculty specialized for addressing various issues of the science of "Total Food Systems." At present, we are pleased to offer an integrated undergraduate program in which students can learn state-of-the-art Japanese technologies and systems, from bio-resource production through food processing and control standards, up to the distribution, transport chains and consumption, all are necessary for ensuring high quality and safe foods while contributing towards sustainable development throughout Asia.

Not merely learning through classroom work, students can undertake relevant experiments or practical field research practices consistent with established learning objectives of the different subjects under the guidance of highly competent academic supervisors. Besides such academic hours, we are also providing many opportunities to make your stay fruitful. Students can enjoy weekend tour to i.e. Miyajima (one of the world heritage sites in Japan), BBQ party or shopping malls in Hiroshima city. Mutual cultural understandings are also expected. Why not join us. Studying abroad can be a life changing experience in your life.

Study Plan (Examples)

Common Courses

- Study on International Issues and Challenges (3 credits)
- Study on Japanese Companies and Social Entrepreneurship (2 credits)

Professional Courses

For students from agriculture or animal breeding fields

- Insect Science (3 credits)
- Animal Science and Technology (3 credits)
- Physiology of Field Crop Production (3 credits)
- Introductory Physiology of Domestic Animals (3 credits)

For students from food science

- Animal Science and Technology (3 credits)
- Modern Food Science (3 credits)
- Molecular-Level Understanding of Functionality of Foods (3 credits)
- Plankton Biology (3 credits)

For students having more interest in social development

- Global Environmental Issues and Management (3 credits)

For students from fisheries or marine biology

- Global Environmental Issues and Management (3 credits)
- Fish Production (3 credits)
- Plankton Biology (3 credits)

ENGINEERING

Fall (Term 3 & 4)

Curriculum Features

- Providing the curriculum to develop engineers and researchers who can contribute to the globalizing industrial production field.
- Through the specialized education directly related to the industry, promoting the skills and knowledge that can contribute to the development of “MONOZUKURI.”
- Providing the opportunities of learning about Japanese companies and industry and “MONOZUKURI” by visiting Japanese companies and having lectures by the professionals working in Japanese companies.

Courses

** The course information below is based on the data of November, 2017. The course available for each academic year and the details of each course could be changed. Please refer to the AIMS-HU Web page for the updated information.*

Industrial Engineering (2 credits)

This course is focusing on “Industrial Engineering”, in particular, “Japanese-style manufacturing” and is based on Practice Based Learning (PBL). In this course, the field researches are very much emphasized; therefore, the students are going to visit the typical Japanese manufacturing companies near Hiroshima University and can learn and experience the “Monozukuri” or the amazing manufacturing technology in Japan. Also, the students can study the culture and craftsmanship in Japanese factories. Tours on five manufacturing companies are scheduled. The students have to make a report and/or presentation for each tour. In addition, at the end of semester, the wrap-up discussion and final report should be made.

Advanced Mechanical Engineering (2 credits)

This class is a lecture series on the advanced products by the companies related to the field of mechanical engineering. The lectures are given by the instructors from five Japanese manufacturing companies. Each company instructor gives three lectures on their advanced products and technologies, especially, background (market research) of the advanced products and technologies, innovative technologies for the advanced products, break-through of the technical cliff and difficulty, Japanese-style research and development, Japanese-style manufacturing. Students are requested to submit reports on their investigation and impression on the advanced product and technology presented in each lecture.

Message from the School of Engineering

SASAKI Gen, Dr. Eng.
Academic Advisor
School of Engineering
Research Fields; Materials Physics in Mechanical Engineering

Two students from ITB has been accepted in my laboratory by AIMS-HU program for several years. First student finished this program and is now studying in master course in our university on the field of metal matrix composites with high damping property. He is enjoining his study and Japanese culture. Second student is studying by AIMS-HU program. He is researching on the wettability between dissimilar metals in our laboratory while attending lectures and going sightseeing in Japan.

Could you join this program to enjoy the academic life in Hiroshima University? I believe you will get good experience and many Japanese and foreign friends.

Study Plan (Examples)

Common Courses

- Study on International Issues and Challenges (3 credits)
- Study on Japanese Companies and Social Entrepreneurship (2 credits)

Professional Courses

- Advanced Biofuel Engineering (2 credits)
- Advanced Mechanical Engineering (2 credits)
- Industrial Engineering (2 credits)
- Applied Materials Physics (2 credits)
- Optimization of Structural and Process Design (2 credits)
- Mechanical Engineering Seminar (2 credits)

Total: 17 credits

Advanced Biofuel Engineering (2 credits)

Learn about production, utilization, and introduction of biofuels.
Lesson 1: What is biomass? / Variety and availability of biomass
Lesson 2: Biomass conversion
Lesson 3: Pellets and briquettes
Lesson 4: Gasification and carbonization
Lesson 5: Supercritical water gasification, other thermochemical conversions
Lesson 6: Biodiesel and other liquid fuel production
Lesson 7: Biomethanation (1) Principle and apparatus
Lesson 8: Biomethnation (2) Examples and system
Lesson 9: Ethanol fermentation (1) Principle and apparatus
Lesson 10: Ethanol fermentation (2) Examples and system
Lesson 11: Ethanol fermentation (3) Lignocellulose and latest technologies
Lesson 12: System (1) System design and evaluation
Lesson 13: System (2) Economic analysis
Lesson 14: System (3) Fundamental of LCA
Lesson 15: Final presentation

Drop weight testing machine force sensing block

Applied Materials Physics (2 credits)

Materials used in the field of mechanical system engineering include a variety of materials such as metallic alloys, fine ceramics, amorphous materials and fine particles. In addition, lattice defects and disordered structures strongly change characteristics of materials. In the present lecture, students mainly study the structures of materials, and then try to understand the basic physical process to realize these structures, and also try to understand how these structures affect the properties of materials.
Lesson 1: Introduction of the lecture
Lesson 2: Crystal structure 1
Lesson 3: Crystal structure 2
Lesson 4: Wave diffraction and the reciprocal lattice 1
Lesson 5: Wave diffraction and the reciprocal lattice 2
Lesson 6: Crystal binding and elastic constants 1
Lesson 7: Crystal binding and elastic constants 2
Lesson 8: Phonons 1
Lesson 9: Phonons 2
Lesson 10: Electrical properties of matals
Lesson 11: Imperfection in solids
Lesson 12: Diffusion and dislocations
Lesson 13: Phase and dislocations
Lesson 14: Thermal properties
Lesson 15: Alloys

Compression (left) direct tension (right)

Vehicle control system design and its evaluation

Other Available Courses (Example of Year 2018)

- **Mechanical Engineering Design (2 credits)**
- **Mechanical Behavior and Strength of Engineering Materials (2 credits)**
- **Optimization of Structural and Process Design (2 credits)**

ECONOMICS

Spring (Term 1 & 2)

経済学

ECONOMICS

Curriculum Features

The Economics field of the AIMS-HU program aims to nurture personnel who can contribute to stable economic development of the whole Asia, with the internationally competent ability to reason, based on a deep understanding of institutional and cultural differences in market economic system between Japan and Asia.

Professional Courses

The course available for each academic year and the details of each course could be changed.

Statistical Characteristics of Japanese Economy (3 credits)

[Course Objectives/Outlines]

Macro economic analysis is based on economic theory of income determination, consumption function, investment function, export and import functions, aggregate price determination, Phillips curve of wages and employment analyses, foreign exchange rate determination, the process of stock prices, public finance, financial policies, money supply, income velocity of money, income distributions, and the like. These economic phenomena and events have numerical aspects which can be compared in international perspective. The objective of this course is to offer a way to represent macro economic causal relationships in concrete manner by making use of statistical data on various economic variables.

[Keywords]

Basic Concepts of Statistics, MacroEconomic Structure of an Economy, Fundamental MacroEconomic Theory,

The Japanese Economy and the Liquidity Trap (3 credits)

[Course Objectives/Outlines]

The bubble economy and the collapse in asset prices in the 1980s; a study of the liquidity trap and the growth recession; the IS-MP model and the model of floating exchange rates; a model of the liquidity trap and policy in a liquidity trap; the key factors of Abenomics.

[Keywords]

Japanese economy, Liquidity trap, Monetary policy, Fiscal policy

Advanced Corporate Finance and Practices in Japanese Companies (3 credits)

[Course Objectives/Outlines]

The aim of this course is to understand the actual financial strategies and the customary financial practices of Japanese companies. The course includes laboratory lessons on event studies, empirical analyses on the cost of capital, the estimation of Shareholders' Value Added.

[Keywords]

Financial strategy, Capital market, Data analysis

Business economics and Japanese practice (3 credits)

[Course Objectives/Outlines]

This course is to study the business practices of Japanese firms from the viewpoint microeconomics, game theory, and economics of information.

[Keywords]

Microeconomics, Game theory, Business practices

Topics in Financial Economics (3 credits)

[Course Objectives/Outlines]

The aim of this course is to understand the structure and the historical transition of the Japanese capital market by working with real data. This course will include the introduction to the empirical analysis, basic financial calculations, corporate valuation, etc. Because good empirical work is always guided by theory, we will also learn some basic asset pricing theory.

[Keywords]

Capital market, Empirical analysis, Asset pricing models

Managerial Accounting (3 credits)

[Course Objectives/Outlines]

The goal of the course is for students to gain understanding of basic elements of Managerial Accounting. Primary subjects in Managerial Accounting will be covered and discussed in the course.

[Keywords]

Management Accounting, Costing, Cost-Volume-Profit analysis, Budgeting, Non-routine decision making

Message from the School of Economics

SUZUKI Yoshihisa, Ph.D.
Academic Advisor
School of Economics
Research Fields: Financial Economics

Dear prospective exchange students,

Welcome to the School of Economics at Hiroshima University and thank you for your interest in the AIMS-HU program. Hiroshima University was established on May 31, 1949. Since its foundation, Hiroshima University has striven to become one of the most prominent and comprehensive universities in Japan for the promotion and development of scholarship and education. We sincerely believe that studying at Hiroshima University will be a valuable experience for you.

As you might know, ASEAN member states and Japan are now conducting exchange projects in a wide range of fields, including political dialogue, economy, culture, sport, and tourism, as well as youth exchange projects. There are many opportunities for students to be involved with a wide range of subjects.

I look forward to seeing you on our campus soon.

Study Plan

To complete the AIMS Economics program, students must take 14 credits in total, including 9 credits from the above list of Professional Courses, and 5 credits from the following Common Courses.

Common Courses

- Study on International Issues and Challenges (3 credits)
- Study on Japanese Companies and Social Entrepreneurship (2 credits)

Student Life and Facilities

International Exchange

NOIE (Network of International Exchange)

This is a program that consists of International and Japanese students, who are interested in international exchange and volunteer-work. They take part in international exchange activities in schools and local communities as paid or unpaid volunteers.

NARUHODO! - Cross Cultural Discussion

This is a program for Japanese students and international students that is aimed at understanding differences in ways of thinking through the group discussion on various topics in English.

International Luncheon

The International Exchange Group holds "International Luncheon" every Thursday at lunch time. International students and Japanese students introduce their daily lifes, to improve mutual understanding of different cultures.

Regional World Cooking

The International Exchange Group will irreguraly hold "Regional World Cooking" once a half term. Lecturers will not only introduce their country's traditional cuisine, but also teach how to cook it.

For more events and activities, please check *Momiji*, our student portal site:
https://momiji.hiroshima-u.ac.jp/momiji-top/en/index.shtml

Orientation

In the first week of arrival the AIMS-HU Program will organize an orientation. In the orientation, the following topics are covered.

- Introduction of Program, Faculty and Staff
- Courses and Registration
- Immigration Information
- Housing
- Financial Information
- Campus Life and Student activities

Support System

Supporter System for International Students

The system was designed for peer student supporters to give newly arrived international students peer-to-peer extracurricular assistance. This assistance contributes to improve the residential/college life of international students, and it is implemented within a designated period of time under the guidance of an academic advisor and administrative staff in charge. Student supporters' duties include:

[Residential/Life Support]
- Picking up the student at the airport/station
- Checking in at accommodations
- Helping with shopping for essential items
- Assisting legal procedures (notification of place of residence/ National Health Insurance, etc.)
- Opening a bank/postal bank account

- Helping with contract procedures for utilities (electricity, gas, water) and/or cellphones
- Any other residential/life related activities international students cannot do by themselves and other support determined by administrative staff

[College Life Support]
- Course Registration support
- Campus/facilities guide (libraries, administrative offices, etc.)
- Accompanying/taking international students to university organized orientation meetings

Health Care

The University Health Service Center is located on campus for emergency treatment, basic healthcare and counseling. Around campus there is a variety of clinics and hospitals available as well.

All exchange students (those who plan to stay in Japan for more than 3 months) are required to join Japanese National Health Insurance after they arrive in Japan. The average monthly premium is approximately 2,500 yen. Application forms are available at the City Hall. Students who join this system are entitled to a 70% discount on all medical and dental fees.

Advising / Counseling

Besides general counseling services at the University Health Service Center, specialists at the Harassment Consultation Office also offer counseling service for students.

Student with Disabilities

Majority of the buildings on Campus have facilities for physically challenged students. In Japanese society, the free movement for people with disabilities can be quite a challenge. Students with physical disabilities wishing to study in Japan are often expected to possess a high level of independence and be prepared to face these challenges.

Hiroshima University is a leading university in Japan for developing support for students with disabilities. It is recommended that students in need of special arrangements contact AIMS-HU at an early stage and seek consultation for the possible special arrangements.

Part-time Work

International students in Japan are, within certain limits, allowed to engage in part-time work. They are, however, required to obtain a work-permit from the Regional Immigration Office and obtain permission from the University.

AIMS-HU students are allowed to work a maximum of 28 hours per week during the semester and up to 8 hours per day during vacations. International students are however not allowed to work in entertainment-related businesses such as bars and nightclubs. Students should be aware that failure to adhere to the Immigration Law is regarded as a criminal offence, and will lead to immediate expulsion from the Program and deportation from Japan.

Although students are stimulated to have a part-time job, as it is a good way to get in touch with Japanese society, part-time work should not interfere with academic activities.

Climate

The climate of Japan is generally mild and knows four clear seasons. Winter in Saijo can be quite cold (-5℃/23F-10℃/50F), with occasional snow. Summer is usually very hot and humid (25℃/77F-38℃/100F). Summer is preceded by the rainy season lasting about one month, in June and July.

The best seasons are spring (cherry blossoms) and fall (fall leaves) with usually long spells of clear weather and mild temperatures.

Students who are not used to this climate should take due precautions to avoid illnesses.

Sports and Clubs

Hiroshima University is host to a rich variety of sports and cultural clubs, ranging from American Football to traditional Japanese music. International Students can also join university clubs. On campus, various sports facilities are available, such as tennis courts, baseball fields, soccer grounds and track and field facilities. There are also four large gymnasia on campus, which are used for a variety of indoor sports.

University Facilities

Libraries

There are three large libraries on campus, each with a sizeable collection of foreign language materials. In addition, each department within the faculties also has its own library. On top of this, resources can also be found in the offices of faculty.

A large part of the collection of Hiroshima University can be searched using the OPAC system on the Library web site. International students can use the library system after they have received their student card.

Computing

All over the campus there are computer facilities as well as the wireless LAN available for students. Students can obtain a university account comprising of Email and Homepage facilities for free.

The university provides classes to provide students with the minimum level of basic skills and knowledge concerning information security compliance (legislative compliance) required in order to ensure that they do not cause any incidents, accidents, or other problems through their use of computers or networks.

Cafeterias and Shops

Hiroshima University is the largest one-campus university in Japan and has in addition to its facilities for research and education, a wide variety of student facilities. The campus has a number of cafeterias, where students can eat fairly cheaply, at about 400 yen a meal.

There are also a number of shops belonging to the University COOP network. Students who are members of the COOP system (Fee ¥2,000) can buy and order books and other goods at discount prices. At the end of their stay at Hiroshima University they can return the card and have their membership fee reimbursed.

Other facilities on campus include a hairdresser, travel agency, post-office and bicycle repair shop.

AIMS-HU Contact Addresses

Hiroshima University
https://www.hiroshima-u.ac.jp/en

AIMS-HU Program
https://www.hiroshima-u.ac.jp/en/husa/aims-hu

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