

Hiroshima University

Graduate School of Advanced Science and Engineering

1. Graduate School Code	14a	
2. Area	Engineering	
3. Research Field	Division of Advanced Science and Engineering / Transdisciplinary Science and Engineering Program Disaster prevention/ Architecture/ Urban, regional and transportation planning/ Marine development and usage/ Ecosystem conservation and management/Biological resource development and usage/ Public health	
4. Degree	Master of Philosophy, Master of Engineering, Master of International Cooperation Studies	
5. Standard Timetable (Years needed for graduation)	Learning Japanese for about 1 year at a designated organization with other JISR participant <u>and studying as a research student for 6 months in the latter half of the term simultaneously</u> , then starting Master Course for 2 years after passing the entrance exam	
6. Language of Program	(1) Lecture: All lectures in English (2) Text: English will be used generally but Japanese text will be used partially for supplementary materials. (3) Laboratory work: Safety instructions are written in English. Conducting of the research is generally instructed by the supervisor in English. (4) Seminar: Seminars including Japanese students are generally in English. (5) Learning Japanese: For details, see “5. Standard Timetable (Years needed for graduation)” and “Japanese Language” in “9. Additional Information.”	
7. Desirable English Level and Necessary Academic Background	Applicants are required to submit an official score certificate of language test. The scores must be fewer than two years old at the time of the entrance examination. In case an applicant cannot submit any of the above score certificates, We will accept an official document made by the university which certifies that the medium of instruction in the foreign institution which the applicant has attended/is attending is English. Applicant must submit this official document instead of the certificate of Japanese/English language test score.	
8. Website	(1) Hiroshima University https://www.hiroshima-u.ac.jp/en (2) Graduate School of Advanced Science and Engineering https://www.hiroshima-u.ac.jp/en/adse (3) Transdisciplinary Science and Engineering Program https://www.hiroshima-u.ac.jp/en/adse/div_adse/program#p14	
9. Additional Information	Availability	Note
Japanese Language		
(1) Necessity of Japanese language for study	Not necessary in Master course	
(2) Availability of Japanese language class	Available	1) There is an opportunity to study Japanese for 1 year before starting Master course. 2) Japanese language program is available after starting Master course. Please refer to the following URL. https://momiji.hiroshima-u.ac.jp/momiji-top/en/international/japanese/class.html

Facility Information		
(1) Dormitory available for JISR participants	Available	Please refer to the following URL https://momiji.hiroshima-u.ac.jp/momiji-top/en/international/housing-for-international-students.html
(2) Prayers room or Mosque	Available	We have prayers room (8th floor)
(3) Halal food available in cafeteria	Available	DAIGAKUKAIKAN-Cafeteria HIGASHI-cafeteria
Others		
(1) Tutor system	Available	Available student supporter for the first 2 months

10. Features and Curriculum of Program

Transdisciplinary Science and Engineering Program conducts research and education, from an international perspective, related to a variety of technologies that can facilitate sustainable development, based upon our knowledge of the local environment of a particular country. More specifically, our focus upon developing countries, primarily in Asia, includes the following areas: disaster prevention, architecture, urban/regional and transportation planning, marine development and usage, ecosystem conservation and management, and biological resource development and usage.

The list of courses offered in AY 2020.

Common Subjects	
Common Graduate Subjects	Credits
World Peace and HIROSHIMA	1
Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1
Japanese Experience of Human Development-Culture, Education, and Health	1
Academic approach to SDGs - A	1
Academic approach to SDGs - B	1
Practical Approach to SDGs	2
Understanding diversity and Inclusion	1
Data Literacy	1
Data Literacy in Medicine	1
Career Management - Theory & Career Development	2
Career Management for Engineer	2
Stress Management	2
Information security	2
Introduction to MOT	1
Entrepreneurship	1
Common Graduate School Subjects	Credits
Academic Writing I	1
Exercises in International Academic Studies A	1
Exercises in International Academic Studies B	2
MOT and Venture Business	1
Technology Strategy for Management	1
Intellectual Property, Finance and Accounting	1
Technology Transfer	1
PBL for Technology Transfer	1
Future Creation Thinking (Basic)	1
International Standardization for Rule Making	1

Management of Technology for Science and Engineering	1
Idea Mining Workshop	1
Business Creation Practicum	1
Introduction to Fieldwork Method and Practice	1
Internship	1
Data Visualization A	1
Data Visualization B	1
Principles of Environment A	1
Principles of Environment B	1
Subjects Specialized for the Program	Credits
Special Exercises of Advanced Science and Engineering Transdisciplinary Science and Engineering A	2
Special Exercises of Advanced Science and Engineering Transdisciplinary Science and Engineering B	2
Special Study of Advanced Science and Engineering Transdisciplinary Science and Engineering	4
Earth Materials	2
Dynamics of Earth Surface Material Cycle	2
Risks and Sciences in Natural Environment	2
Global Fluid Dynamics and Natural Disaster Prevention	2
Fundamentals of Complex Matter	2
Complex Materials Science	2
Structure of Complex Matter	2
Quantum Theory of Correlated Matter	2
Correlated Materials Science	2
Spectroscopies of Correlated Matter	2
Information Systems	2
Information Security	2
Computational Science	2
Computational Statistics	2
Media Communication	2
Sustainability Materials Science	2
Seminar in Integrated Arts and Sciences	2
Environmental Management	2
Developing Designing Ability	2
International Environmental Cooperation Studies	2
Practical Seminar on International Cooperation Project	2
Development Technology	4
Transportation Engineering	2
Transportation Planning	2
Regional and Urban Engineering	2
Tourism Policy	2
Fundamentals of Survey Methodology	2
Risk Management Technology	2
Sustainable Architecture A	2
Sustainable Architecture B	2
Energy Science and Technology	2
Numerical Environmental Impact Assessment I	2
Numerical Environmental Impact Assessment II	2
Geographic Information System Technology	2

Botany Resources for the Future	2
Environmental Monitoring	2
Biomass Energy Technology	2
Ecosystem Conservation and Management Science	2
Management and Conservation of Ecosystems	2
Environmental Health Science	2
Urban Environmental Science	2
Special Seminar for Linkage Program I	2
Special Seminar for Linkage Program II	2
Joint Exercises in Advanced Science and Engineering Transdisciplinary Science and Engineering	2

11. Professors and Associate Professors

Position	Name	Research Subject/ Contact
Professor	ZHANG Junyi	<p>Various urban, transportation, environment and energy, health, and tourism issues are targeted from the viewpoint of mobilities and urban policy. Relevant research deals with the development of methodologies, technological development, and policy evaluation and formulation for problem solving based on interdisciplinary approaches.</p> <p><For more detail></p> <p>URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.0eca0b2f387646e6520e17560c007669.html</p> <p>URL (website of this laboratory): https://home.hiroshima-u.ac.jp/~zjy/</p>
Professor	NISHINA Daisaku	<p>Living environment planning in buildings and urban area: water environment, landscape and environmental psychology</p> <p><For more detail></p> <p>URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.57151c9f8dd66850520e17560c007669.html</p>
Professor	FUJIWARA Akimasa	<p>Transportation planning methods, evaluation of transport policies, and sustainable development and transport</p> <p><For more detail></p> <p>URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.c27c423698841175520e17560c007669.html</p> <p>URL (website of this laboratory): https://home.hiroshima-u.ac.jp/afujiw/ja/home-2/</p>
Associate Professor	KASHIMA Saori	<p>Epidemiological study focusing on environmental health problems, Development of health care system based on spatial statistics</p> <p><For more detail></p> <p>URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.bc7a786b0d4b70d1520e17560c007669.html</p> <p>URL (website of this laboratory): https://home.hiroshima-u.ac.jp/~kashima/en/</p>

Position	Name	Research Subject/ Contact
Associate Professor	KUBOTA Tetsu	Building and urban environmental science for achieving sustainable development in developing world <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.da39c2ab264a8c8e520e17560c007669.html URL (website of this laboratory): https://home.hiroshima-u.ac.jp/tetsu/index.html
Associate Professor	SHARIFI AYYOUB	Urban Climate Change Mitigation and Adaptation; Nature-based Solutions; Green Infrastructure; Urban Microclimate, Urban Resilience; Sustainable Urban Forms; Assessment Tools. <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.a63149f0ebc98d0e520e17560c007669.html
Associate Professor	CHIKARAISHI Makoto	Urban risk management / Advanced infrastructure planning /Activity-based analysis <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.a0a69e8341602e5a520e17560c007669.html URL (website of this laboratory): https://home.hiroshima-u.ac.jp/~mkt682/
Associate Professor	TRAN Dang Xuan	Development of biomass energy technologies and application to developing countries Agricultural ecology and development of sustainable agricultural technologies <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.8b3b2c968ff6a086520e17560c007669.html URL (website of this laboratory): https://home.hiroshima-u.ac.jp/~tdxuan/
Associate Professor	HOSAKA Tetsuro	Research and education on ecology and ecosystem management <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.6ffe432301cb646e520e17560c007669.html URL (website of this laboratory): https://home.hiroshima-u.ac.jp/hosaka3/
Associate Professor	LEE Han Soo	Renewable energy evaluation and management in developing countries, Numerical models for coastal hazards • disaster prevention • mitigation, Evaluation of climate changes on natural hazards and renewable energy environment. <For more detail> URL (profile): http://seeds.office.hiroshima-u.ac.jp/profile/en.a0ac8f6169d294e3520e17560c007669.html URL (profile of this laboratory): https://home.hiroshima-u.ac.jp/leehs/

12. Academic schedule

1st YEAR

<In case of the schedule in 2020>

Fall Semester (October 1 - March 31)

October 1	Entrance Ceremony, Orientation
October 2 – February 8	Classes
Early October	International Student Orientation (University-wide)
Mid October	Deadline of Class Registration
December 26 - January 5	Winter Vacation
February 9 - March 31	End-of- Academic-Year Holidays

Spring Semester (April 1 - September 30)

2nd YEAR

<In case of the schedule in 2020>

Fall Semester (October 1 - March 31)

Spring Semester (April 1 - September 30)

April 1 - April 7	Spring Vacation
April 8 – August 13	Classes
Mid April	Deadline of Class Registration
End July	Thesis Submission
Mid August	Thesis Defense
August 14 - September 30	Summer Vacation
September 18	Graduation Ceremony

(Research student)

An examination both written and interview to enroll master's degree course will be held (Late August – Early September).

13. Facilities and Cultural activities for International students

(1) Student Dormitory

“Ikenoue Dormitory” (approx. 180 rooms for international students) and “International House” (60 single, 10 family units) located on the Higashi-Hiroshima campus are available for international students. However, placement in on-campus housing is not guaranteed due to space limitations. In addition, period of residence is limited. The majority of students live in privately-owned apartments.

Please refer to the following URL

<https://momiji.hiroshima-u.ac.jp/momiji-top/en/international/housing-for-international-students.html>

(2) Japanese Language Program

International students can learn Japanese through the following programs in Hiroshima University.

- **Japanese Language/Japanese Affairs**
- English Your Hiroshima Life!! -Japanese Language Class-
- Nihongo model class

Please refer to the following URL

<https://momiji.hiroshima-u.ac.jp/momiji-top/en/international/japaneseclass.html>

(3) Others (Healthcare center, Counseling Support, Homestay Program, Cultural Tour etc.)

- 1) When you're faced with a problem, be it about your studies, your health, or in your everyday life, please feel free to consult with the following organizations.

- Morito Institute of Global Higher Education
- Health Service Center
- Harassment Consultation Office

Please refer to the following URL

<https://momiji.hiroshima-u.ac.jp/momiji-top/en/international/advising.html>

- 2) We have a Homestay Program. Foreign students and their families can visit Shobara City in Hiroshima Prefecture, and stay with Japanese families for a couple of days.

14. Information on Job Placement Assistance Service for International Students

We hold job seminar, guidance in the Global career design center, and foreign student can participate.
(We hold foreign student-limited guidance twice a year)

We're accepting job-hunting question and consultation in the Global career design center.

15. Message for JISR applicants

Within the campus, we have welfare facilities such as various cafeteria, a travel agency office, stores, book shops, and a barber shop. Hiroshima University also has a post office, a university health service center, and a dental clinic in the campus. Health Service Center provides mental counseling service to international students in English.