

Five-Year Ph.D. Program, Hiroshima University

TAOYAKA Program

for Creating a Flexible, Enduring, Peaceful Society

Application Guideline

- April 2014 Admission -

November 2013



HIROSHIMA UNIVERSITY

◆ Admission Policy

In order to realize multicultural coexistence—which is a worldwide theme— it is essential to foster human resources equipped with the autonomy, execution, multi-faceted thinking, and creativity to promote the formation of symbiotic regional societies.

This program aims to foster global leaders who contribute to multicultural coexistence while working closely with those regions, by deeply understanding the regional society and culture, and accordingly developing technologies and implementing these for resolving the problems faced by disadvantaged regions. We seek the following students for this program.

- Students who desire to acquire cross-disciplinary knowledge and skills and contribute to the development of society.
- Students who are interested in the cultures and issues of disadvantaged regions and strongly desire to contribute to the development of such regions.
- Students who desire to take a leadership role and play an active part in regional societies and/or the international community.
- Students who have excellent motivation, execution, responsibility, and human strength.

◆ Outline

This program further expands and develops the peace education built up by Hiroshima University based on the key words “conflict” and “nuclear” in even broader fields, and is positioned as part of the university’s continuous efforts as an institution aspiring to peace. The principles of the program are as follows.

- I. Cultural autonomy and communication beyond mere coexistence, which generate a synergy effect through the mutual interactions of different cultures and further lead the creation of new forms of industry that differ from conventional forms through the synchronization of cutting-edge science and technology and regional cultures.
- II. Development of various technologies corresponding to the needs of each region, as there is no single scientific and technological solution for problems among diversifying cultures and societies.
- III. Fostering a group of human resources capable of applying and/or implementing appropriate cutting-edge science and technology properly to on-site solutions while not only understanding other cultures but also continuously creating culture in order to achieve constant evolution.

Based on these principles, the program aims to foster leaders in the pursuit and realization of scientific and technological resolutions in the development of science and technology led by culture. Specifically, the program aims to

- I. Foster human resources who create culture capable of adapting to social/environmental changes and/or technological innovations.

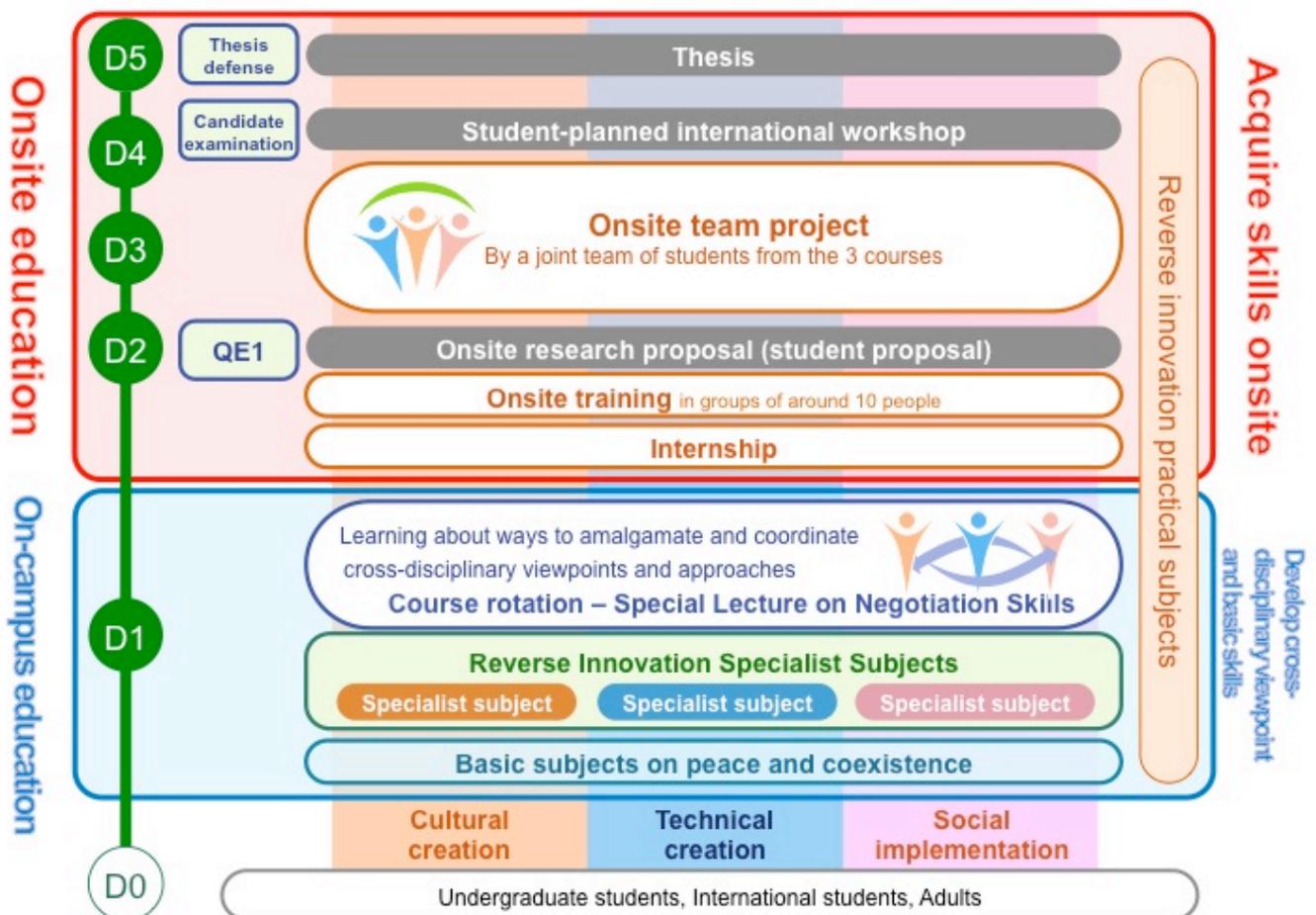
- II. Foster human resources who create science and technology that can be applied to problems concerning the cultural and/or social environments of disadvantaged regions.
- III. Foster human resources who implement this new science and technology in the way that harmonizes with the newly created diverse regional cultures.

In order to foster these human resources, three courses have been established within the program: the (1) Cultural Creation Course, (2) Technical Creation Course; and (3) Social Implementation Course. Through cooperation among these three courses, the program provides student proposal-based education with a framework of on-campus education—through which students acquire specialized knowledge necessary for peace education and reverse innovation—and on-site education that is practiced closely with the regions where respective cultures have been created and nurtured.

The program also nurtures students’ leadership skills in resolving problems in on-site projects as teams comprising students majoring in different fields across disciplines.

Through the above education, the program produces multicultural coexistence instigators for realizing a flexible, enduring, and peaceful society by playing active roles in industrial, governmental, and academic fields around the world.

◆ Schematic Diagram of the Program



◆ Personnel Development through Three Courses

The creation of a flexible, enduring, and peaceful society requires “human resources who create culture,” “human resources who invent technology,” and “human resources who unite culture and technology and implement them in society.” Thus, this program provides cross-disciplinary education through three courses: the Cultural Creation Course; Technical Creation Course; and Social Implementation Course. Through these courses, the program fosters leaders with multi-faceted thinking ability, autonomy, execution ability, and creativity. The ideal human resources each course aims to nurture are as follows.

(1) Cultural Creation Course

Academic Background and Interests: Humanities, Social Science

- Can recognize issues related to cohabitation and coexistence of diverse people and regions
- Have the communication skills to be able to interact with a diversity of people
- Can identify cultural characteristics or social issues of disadvantaged regions
- Can make specific proposals/suggestions for creating culture and resolving social issues
- Can improve and expand social capital for resolving social issues through cooperative efforts

(2) Technical Creation Course

Academic Background and Interests: Science, Engineering, Agriculture

- Can recognize issues related to cohabitation and coexistence of diverse people and regions
- Have the communication skills to be able to interact with a diversity of people
- Can identify cultural characteristics or social issues of disadvantaged regions
- Have both high specialization in the field of electronic/electrical engineering and broad knowledge in engineering
- Can propose and implement technological development in response to the needs of regional societies

(3) Social Implementation Course

Academic Background and Interests: Engineering, Agriculture, Economics

- Can recognize issues related to cohabitation and coexistence of diverse people and regions
- Have the communication skills to be able to interact with a diversity of people
- Can identify cultural characteristics or social issues of disadvantaged regions
- Have specialized engineering or economic knowledge related to public policies or social infrastructure planning
- Can propose and implement socially desirable implementation methods based on analysis of the impact and effects of science and technology on society.

The TAOYAKA Graduate Program is supported by the Program for Leading Graduate Schools of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

TAOYAKA Graduate Program for Creating a Flexible, Enduring, Peaceful Society

Program Executive: SAKAKOSHI Masaki, Vice President of Hiroshima University

Program Coordinator: OKAHASHI Hidenori, Professor of Graduate School of Letters

April 2014 Admission

Hiroshima University Graduate Leadership Program seeks students in the following capacity:

1. Number of students to be admitted

Courses	Number of Students
Cultural Creation Course	Vary
Technical Creation Course	
Social Implementation Course	

2. Eligibility for Application

- [1] A person who graduated from a university.
- [2] A person who has received a bachelor's degree from the National Institution for Academic Degrees and University Evaluation, in accordance with stipulations set forth in Article 104, Paragraph 4 of the School Education Law (Act No. 26 of 1947; hereafter, Law)
- [3] A person who has completed 16 years of formal schooling in a foreign country.
- [4] A person who has completed 16 years of formal schooling of a foreign country, by earning the credit(s) of correspondence course(s) in a schooling program in Japan.
- [5] A person who has taken courses from a foreign university in Japan (completing 16 years of formal schooling of the country) wherein the foreign university offers courses in accordance with the educational system of that country and the schooling has also been designated separately by the Ministry of Education, Culture, Sports, Science and Technology (MEXT).
- [6] A person who has completed a specialized curriculum at a vocational school (only vocational schools whose period of education is four years or longer and thus fulfills criteria stipulated by MEXT) that is recognized as such by MEXT.
- [7] A person designated by the MEXT (Ministry of Education Notice No. 5 of February 7, 1953).
 - a) A person who has graduated from a university prescribed by the former University Ordinance (Imperial Ordinance No. 388 of 1918)
 - b) A person who has graduated from the advanced course of a higher normal school prescribed by the former Higher Normal School Regulations (Education Ministry Ordinance No. 11, 1894)
 - c) A person who has completed a research course of which the completion period was set at one year or more at a higher normal school or a women's higher normal school prescribed by the former Normal Education Ordinance (Imperial Ordinance No. 109 of 1943)
 - d) A person who has graduated from a junior high school or a higher women's school prescribed by the former Secondary School Ordinance; a person who has graduated from a professional school which is prescribed by the former Professional School Ordinance and of which the completion period was set at five years or more; or a person who has graduated from a professional school which is prescribed by the former Professional School Ordinance and of which the completion period was set at four years or more, and who subsequently has completed a research course of which the completion period was set at one year or more.
- [8] A person who has admitted to a postgraduate program in accordance with Article 102, Paragraph 2 of the School Education Law and who has been recognized as having suitable academic ability for

receiving a graduate school education by the relevant Graduate School of Hiroshima University.

[9] A person who is 22 years of age or older and has been recognized through an individual admission screening process by the relevant Graduate School of Hiroshima University as having academic ability equivalent to that of a university graduate.

[10] A person who has attended a university for at least three years, (including person who has been specially selected by the MEXT), and has been recognized by the relevant Graduate School as having achieved excellent grades.

[11] A person is expected to obtain one of the above qualifications **by Monday, March 31, 2014 (JST)**.

*Note 1: A person who intends to apply for admission under the eligibility criterion [10] above must meet the following requirements.

a) Applicant must have earned 80% of all credits required for graduation from university by the end of the third year.

b) Grades of more than 90% of all credits applicants have earned should be “A” or better.

*Note 2: A person who is admitted under the eligibility criterion [10] is, if not graduating early from a university after attending the university for more than 3 years, recorded as a “withdrawer” on the school registration. Therefore, the person may lose the qualification to take various national examinations of Japan in which an undergraduate degree is required.

*Note 3: Persons who intend to apply for admission under eligibility criteria [8], [9], and [10] above must first undergo a preliminary evaluation. Please refer to “**3. Preliminary Evaluation for Application Eligibility**”.

3. Preliminary Screening for Application Eligibility

All applicants who need to undergo the preliminary screening of application eligibility must check “9. The List of the Program Members” and this program’s website, and consult the program member whom they wish to have as their primary adviser beforehand regarding the content of the research that they wish to conduct.

Those who need to undergo the preliminary screening for application eligibility must bring mail or e-mail the documents necessary for the preliminary evaluation to the university during the submission period below. Incomplete documents will not be accepted.

[Submission Deadline] **Monday, December. 16, 2013 / 5:00 p.m. (JST)**

[Documents Required for Preliminary Evaluation]

Documents	Required for	Contents
Preliminary Screening Application of the Entrance Examination	All Applicants	Use the prescribed form
Academic Transcript	All Applicants	Must be issued by the president or dean of the university or college from which the applicant graduated (Must be written in Japanese or English)

Documents	Required for	Contents
Certificate of Research Activity Summary of Research Experience Research Achievements	Required by applicants applying under the criterion [8] or [9] of the Eligibility for Application.	Use the prescribed form
Certification of Graduation (Course Completion) or Certificate of Expected Graduation (Course Completion)	Required by applicants applying under the criterion [8] or [9] of the Eligibility for Application.	Must be issued by the president or dean of the university or college from which the applicant graduated (Must be written in Japanese or English)

(3) Applicants shall be notified of the results of preliminary evaluation via e-mail by:

Wednesday, December 25, 2013 (JST)

(4) For Submission: **Please refer to “10. Inquiries and Submission”**

4. Application Procedure

Applicants need to bring, mail, or e-mail the application documents to the university during the application period below.

Incomplete applications will not be accepted.

[Application Period]:

Tuesday January 7, 2014 to Tuesday January 14, 2014 at 5:00 p.m. (JST)

- Please refer to the office hours (8:30am to 5:00pm) for submitting your application in person.
- If sending via postal service, please send it via registered mail and write “Application for Graduate Leadership Program” in red on the envelope.

[Application Documents]

If you are recognized as eligible for applying in your preliminary evaluation for application eligibility, you are not required to re-submit the documents you have already submitted.

Documents	Required for	Contents
Application Form for Admission	All Applicants	Use the prescribed form
Essay	All Applicants	Use the prescribed form (Must be written in Japanese or English)
Recommendation Letter	All Applicants	Use the prescribed form
Academic Transcript	All Applicants	Must be issued by a university or college president or dean (Must be written in Japanese or English)
Certificate of Graduation, or Certificate of Expected Graduation	All Applicants	Must be issued by a university or college president or dean (Must be written in Japanese or English)
Letter of Approval for Taking the Entrance Examination	Persons Working at a Private Company.	Only required for those who wish to maintain their employment at a private company. during the enrollment in this program. Must be issued by the applicant’s department manager

Documents	Required for	Contents
Score of English Proficiency Exam.	Non-native English Speakers	Please submit the score results from exams taken within the past 2 years of our admission examination date. Scores from one of the following tests are accepted. (an applicant can submit more than one score) * TOEIC Open Exam, * TOEIC-IP (includes College TOEIC),* TOEFL-PBT, * TOEFL-iBT
Transcript of Japanese Proficiency Exam.	Foreign Applicants who have learned the Japanese language	Please submit the transcript results from exams taken within the past 2 years of our admission examination date. Transcripts from one of the following tests are accepted. (Applicants can submit more than one transcript.) * PLPT, * “Japanese as a Foreign Language” in EJU, * Certificate Examination of preparatory education for prospective foreign-government sponsored students in China and Malaysia
Certificate of Residence in Japan	Foreign Applicants	Foreign applicants who currently reside in Japan must submit the certificate.
Certification for Japanese Government (Monbukagakusho: MEXT) Scholarship	Japanese Government Scholarship Students	Japanese Government Scholarship Students must submit the certification.
Examination Fee 30,000 Japanese yen	All Applicants (except Japanese Government Scholarship Students)	Applicants will receive the prescribed payment form in a mail. Fill out your name and address on the prescribed payment form and pay the examination fee at a bank in Japan by the payment date (you cannot pay it by ATM). A bank transfer fee will be charged.

(3) **Application Submission: Please refer to “10. Inquiries and Submission”**

(4) Notes

- a) Only original certificates are acceptable.
- b) Documents cannot be modified or amended after submission.
- c) Application documents and the examination fee are non-refundable.
- d) Personal information (name, date of birth, gender, and other personal information.) recorded on application forms will be used for the admission selection procedures, notification of acceptance, and enrollment procedures. Once admitted applicants have entered the university, the university will manage the data for use in matters relating to student support (such as scholarship applications and tuition fee exemption applications). This data will not be used for any other purpose or be seen by anyone except staffs of this university.
After an agreement has been made regarding the appropriate use of personal information, there may be cases where related business is entrusted to companies outside the university for the purpose of computer management.
- e) All applicants must check “9. The List of the Program Members” and this program’s website before submitting the application documents, and the applicant must contact the program member whom he/she wish to have as his/her supervisor, and consult the supervisor regarding the content of the research that the applicant wish to conduct.

5. Application Method for Applicants who require special considerations for taking the examination and studying

Applicants with physical disabilities who require special considerations for taking the examination and studying must submit an application form for advance consultation (no prescribed form provided).

[Submission Deadline]: Monday, December 16, 2013 (JST)

[Application Materials]: Application form for advance consultation must contain the following information:

- a) Name, address, and phone number
- b) Name of the university or college which the applicant graduated
- c) Type and degree of disability (a physician's letter or a copy of the applicant's disability certificate will be required for applicants)
- d) Considerations necessary for taking the examination
- e) Considerations necessary for studying after admission
- f) Considerations given to the applicant at the university or college graduated
- g) Current circumstance/condition of daily life

6. Selection Procedures

(1) First Selection (Document Examination)

The Application Documents that applicants have submitted will be evaluated.

Applicants shall be notified of the results of the first selection via e-mail by **January 27 (Mon.), 2014 (JST)**.

(2) Second Selection (Oral Examination etc.)

Examination Period: Between Tuesday, January 28, 2014 to Friday, February 7, 2014 (JST)

* Detailed schedule will be determined by Hiroshima University.

* Date and venue of the examination will be informed to the applicant separately.

Applicants will be evaluated based on:

- Qualifications for this program (basic scholastic ability, quality in becoming a leader, language proficiency, etc.)
- Submitted application documents

(3) Admission Decision

a) Applicants will be comprehensively evaluated based on the results of both Documentary and Oral Examinations.

b) Applicants will be selected based on:

motivation for the program, scholastic aptitude to the field, and basic scholarship

(4) Announcement of Successful Applicants: 10 a.m. / Friday, March 7, 2014 (JST) (tentative)

A list of the ID numbers of accepted applicants will be posted on the **Graduate Leadership Program Website** (<http://taoyaka.hiroshima-u.ac.jp/>) and the notification of admission will also be sent to accepted applicants by e-mail and postal mail.

No telephone/e-mail inquiries regarding admission shall be accepted.

7. Financial Support for Students

Students enrolled in TAOYAKA Graduate Program will receive the following financial support:

NOTE: If a student withdraws from this program before completion, the financial support shall be cut off at the time of the student's withdrawal.

- <1> Free student housing (limited for students who apply for residence at accommodations designated by the university and whose application is accepted.)
- <2> Scholarship (from 180,000 yen to 200,000 yen / month: estimated) without repayment requirement

*Note1: Students who are receiving other scholarships/financial aids may not be able to receive <2>. (Japanese Government Scholarship Students and other students who receive scholarships must select whether to receive <2> or their existing scholarship.)

*Note 2: Students who receive the scholarship without repayment requirement are obliged to dedicate themselves to this program. In this regard, in principle, such students are not allowed to engage in part-time jobs, etc.

*Note 3: The amount of the scholarship without repayment requirement is reviewed every semester, based on the evaluations, such as academic performance and research progress toward the completion of the program.

*Note 4: Based on the university's regulations, there are cases where the amount of the scholarship without repayment requirement may be reduced or the provision of the scholarship may be suspended.

- <3> Financial support for doing research, giving a presentation at an academic conference, participating in an internship program abroad, and promoting other efforts to complete this program will be provided within the amount set by this program.

8. Entrance Costs

(1) Admission Fee: 282,000 Japanese yen

(2) Tuition: 535,800 Japanese yen (per year)

a) Students who do not receive scholarships will receive the following financial support:

(1) Exemption from the admission fee

(2) Exemption from the tuition fee

b) Once after the entrance fee is paid, it will not be returned for any reason.

c) The amount of money mentioned above in (1) and (2) is as of April, 2013.

The tuition fee may be revised during the course of your study.

9. List of the Program Members

All applicant must consult the program member whom he/she wish to have as his/her supervisor beforehand regarding whether the activities he/she wish to promote are suitable for the program, as well as regarding the content of the research that he/she wish to conduct.

[Culture Creation Course]

Name	Position	Graduate School	Research Field
KAWANISHI Hidemichi	Professor	Letters	Japanese History
MAHARJAN Keshav Lall	Professor	International Development and Cooperation	Area Studies of South Asia Rural economics Agricultural economics
OKAHASHI Hidenori	Professor Program Director	Letters	Human geography
SEKI Koki	Associate Professor	International Development and Cooperation	Cultural anthropology Southeast Asian Regional Studies
TOGAWA Masahiko	Associate Professor	International Development and Cooperation	Cultural anthropology Religion and Society in South Asia
TOMOZAWA Kazuo	Professor	Letters	Human geography Economic geography Urban Geography

[Technical Creation Course]

Name	Position	Graduate School	Research Field
HIGASHI Seiichirou	Professor	Advanced Science of Matter	Thin film materials Devices engineering Semiconductor engineering
IDAKU Ishii	Professor	Engineering	Sensing engineering Hyper-human robotics technology
KADOYA Yutaka	Professor	Advanced Science of Matter	Optical electronics Ultrafast photophysics
MATTAUSCH Hans Jurgen	Professor	Advanced Science of Matter	Semiconductor engineering Integrated circuit engineering
MIURA Michiko	Professor	Advanced Science of Matter	Device physics Semiconductor electronics Semiconductor device engineering
NISHIZAKI Ichirou	Professor	Engineering	Social informatics System engineering Game theory Decision making
TSUJI Toshio	Professor	Engineering	Biological systems engineering Human motion analysis Bioelectric signal processing Medical electronics engineering
YOKOYAMA Shin	Professor	Advanced Science of Matter	On-chip optical interconnection Integrated optical biosensor

Name	Position	Graduate School	Research Field
YORONO Naoto	Professor	Engineering	Control system engineering Electric power and energy system Voltage stability

[Social Implementation Course]

Name	Position	Graduate School	Research Field
FUJIWARA Akimasa	Professor	International Development and Cooperation	Transportation planning Environmental engineering
KANEKO Shinji	Professor	International Development and Cooperation	Environmental economics Environmental policy
KAWAI Kenji	Professor	Engineering	Concrete engineering Structural materials
KAWAMURA Kensuke	Associate Professor	International Development and Cooperation	Remote sensing Grassland ecology
KAWANO Noriyuki	Professor	International Development and Cooperation	Peace Studies Global Nuclear Damages
OHASHI Akiyoshi	Professor	Engineering	Biological wastewater treatment Energy recovery by microbes Nitrogen and Phosphorous removal Microbial community analysis
YOSHIDA Yuichiro	Professor	International Development and Cooperation	Transportation economics Applied econometrics
ZHANG Junyi	Professor	International Development and Cooperation	Urban and transportation planning Transportation engineering

10. Inquiries and Submission (If you need more detailed information, please contact the following)

1-5-1 Kagamiyama, Higashi-Hiroshima, 739-8529, JAPAN
Office of TAOYAKA Graduate Program, Hiroshima University
Tel: +81-(0)82-424-6152 E-mail: taoyaka-program@office.hiroshima-u.ac.jp

TAOYAKA Graduate Program for Creating a Flexible, Enduring, Peaceful Society

Website: <http://taoyaka.hiroshima-u.ac.jp/>