

Kyushu University Q-Energy Innovator Fellowship Application Guidelines (October 2022)

1. Purpose

"Q-Energy Innovator Fellowship" (hereinafter Q-Energy Fellowship) provides a research grant to excellent doctoral students in Kyushu University who are hopefuls of advancing science, technology and future innovation in Japan. This grant is created in line with the "University Fellowship Project for the Creation of Science and Technology Innovation" established by the Ministry of Science and Education, Culture, Sports, Science and Technology. It offers combined support of funds; research expenses, and research support allowance which aims to free students from financial concerns and enables them to concentrate on their research.

Q-Energy Fellowship aims to strategically cultivate "GX doctorate students" who have the vision of realizing a decarbonized society and will lead Green Transformation (GX). To achieve this aim, this Fellowship has programs to nurture students' strong research ability and perspective views on their research.

The program offers opportunities for students to study on Kyushu University's strong areas; Frontier Energies such as hydrogen, geothermal energy, wind power, and CO2 capture; and Decarbonized Systems in society such as mobility.

It provides environments to broaden students' horizon with online courses of one's choice both in the humanities and science field, collaboration with industry and organizations inside and outside of Japan, and presentation opportunities.

Program Outline (also refer to Fig. 1)

[Cultivate strong research abilities and support career paths]

- A variety of online lectures which enable students to acquire broad views and deep understandings of decarbonized energy
- Opportunities to participate in government's research projects and joint researches with private sectors and universities overseas.
- Discussions in joint seminars which transcend the boundaries of laboratories, specialties and faculties

[Help secure career path]

- Opportunities of internship at partner companies, universities overseas, and local governments
- Presentation to partner companies which have on-campus labs.

Details of the research and career development programs in this fellowship are shown in the attached table.

"Kyushu University Innovator Fellowship"

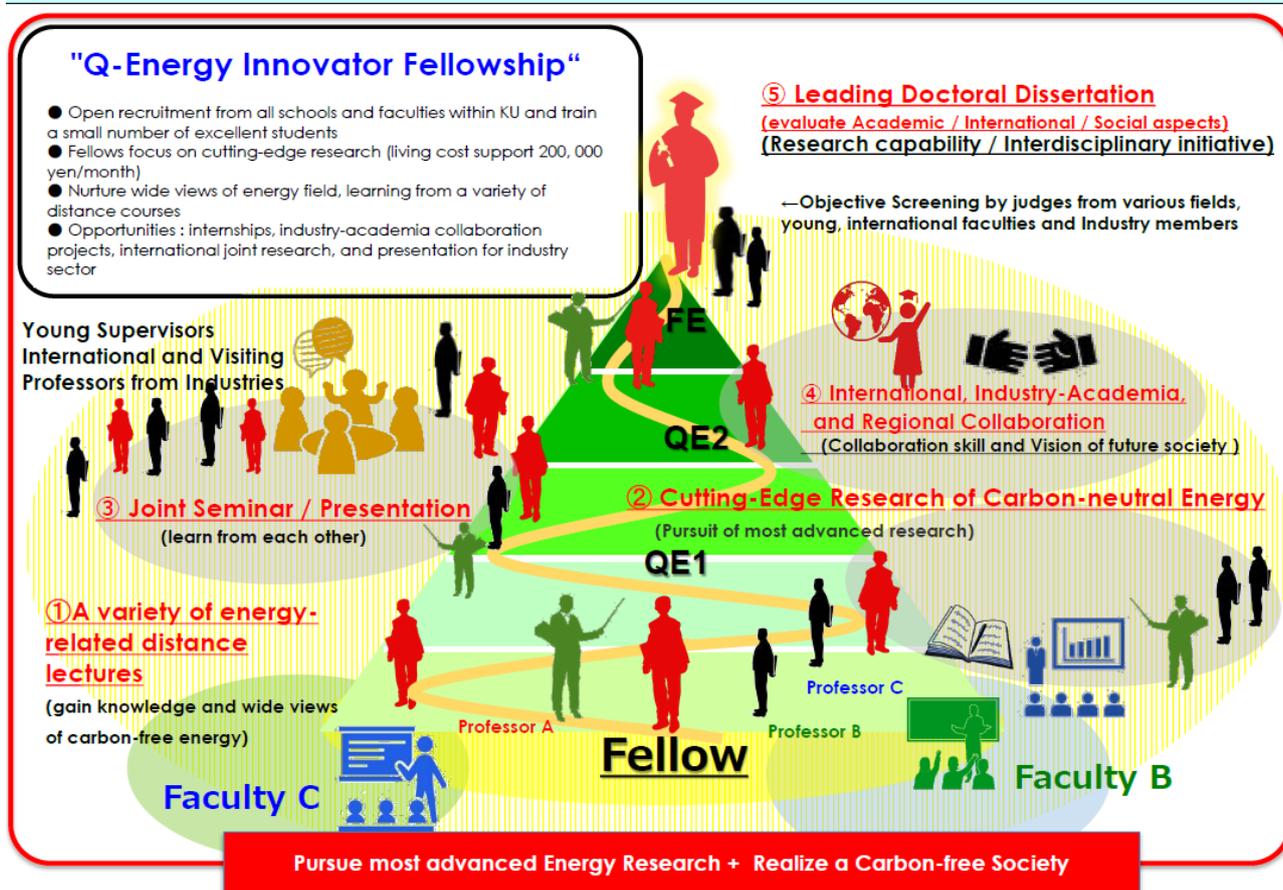


Figure1: Overview of Q-Energy Fellowship

2. Recruitment

I. General Application

(Applicant Eligibility)

Eligible Applicants should meet the following requirements (1) to (4).

- (1) Graduate school students of Kyushu University as of October 1, 2022 who fall under or are expected to fall under;
 - i First year in doctoral course (less than 12 months) with a standard study period of three years
 - ii Third year in doctoral course (between 24 and 36 months) with a standard study period of five years
 - iii Second year in doctoral course (between 12 and 24 months) with a standard study period of four years
- * A leave of absence is not counted if it is six (6) months or more
- (2) Aspire to engage in decarbonization energy area and willing to work in line with the purpose of human resource development stated in the Green Transformation Doctoral Program.
- (3) Those who do not fall under any of the followings:
 - (i) Those appointed as research fellows of the Japan Society for the Promotion of Science (JSPS)

- (ii) Those appointed as fellows of Support for Pioneering Research Initiated by the Next Generation (SPRING) or its applicants.
- (iii) Students enrolled in the Graduate Program of Mathematics for Innovation.
- (iv) Students enrolled in the Program for Leading Graduate Schools.
- (v) Those who receive scholarships, funds from the national government, private organizations and are not allowed to receive financial support from the other organizations.
- (vi) Those receiving a Japanese Government (Monbukagakusho: MEXT) Scholarship for international students.
- (vii) Those who are recognized as having stable income exceeding 2.4 million yen from Kyushu University, companies, or other organizations, or from their own business, including salary, executive remuneration, etc.
- (viii) Those who are receiving financial aid from other educational programs at Kyushu University and have not obtained approval from those program director to apply for this Project.

Note: It is permitted to receive a Japan Student Services Organization (JASSO) scholarship and Fellowship Grant at the same time.

(Number of Applicants to be accepted)

When the Fellowship Begins	Number of Applicants to be Accepted	Eligible Applicants
October 2022	~3	Enrollees in April 2022 Enrollees in October 2022

II. Reservation Application

Undergraduate and Master's students who wish to enter Doctoral Course can apply for Q-Energy Fellowship. (This includes the third-year equivalent of an integrated doctoral course with a standard duration of five years and the second-year equivalent of a doctoral course with a standard duration of four years. Hereinafter "Doctoral course")

The purpose of this reservation application is to alleviate financial concerns before entering a doctoral course and to support a planned student life.

Those who have been selected for a reserved application are considered to be reserved fellows.

(Applicant Eligibility)

Eligible Applicants should meet the following requirements (1) to (4).

- (1) Students enrolled in the master's course or undergraduate students of Kyushu University (however, undergraduate students are limited to those in the final year)
- (2) Aspire to engage in decarbonization energy area and willing to work in line with the purpose of human resource development stated in Green Transformation Doctoral Program.
- (3) Those who do not fall under any of the followings:
 - (i) Those appointed as research fellows of the Japan Society for the Promotion of Science (JSPS)

- (ii) Those appointed as fellows of Support for Pioneering Research Initiated by the Next Generation (SPRING) or its applicants.
- (iii) Students enrolled in the Graduate Program of Mathematics for Innovation.
- (iv) Students enrolled in the Program for Leading Graduate Schools.
- (v) Those who receive scholarships, funds from the national government, private organizations and are not allowed to receive financial support from the other organizations.
- (vi) Those receiving a Japanese Government (Monbukagakusho: MEXT) Scholarship for international students.
- (vii) Those who are recognized as having stable income exceeding 2.4 million yen from Kyushu University, companies, or other organizations, or from their own business, including salary, executive remuneration, etc.
- (viii) Those who are receiving financial aid from other educational programs at Kyushu University and have not obtained approval from those program director to apply for this Project.

(Number of Applicants to be accepted)

When the Fellowship Begins (Expected Date of Entry to the Doctoral Course)	Number of Applicants to be Accepted	Eligible Applicants
April 2023	~4	2nd year Master's student (admission in the spring semester)
October 2023	~1	1st year Master's student (admission in the fall semester)
April 2024	~2	1st year Master's student (admission in the spring semester)
October 2024	~1	4th year Undergraduate Student (admission in the fall semester)
April 2025	~2	4th year Undergraduate Student (admission in the spring semester)

(Fellow Certification)

The reserved fellows will be recognised as Fellows when they are admitted to the doctoral course and are confirmed to have met the eligibility requirements.

3. Obligations

Fellows are requested to:

- (1) concentrate on their study and researches according to a set research plan.
- (2) participate in joint seminars (see Appendix 2), give presentation in conferences with industry and affiliated universities (see Appendix 3), participate in internships and joint research in industry-academia collaboration, international collaboration, and regional collaboration to upgrade research skills and collaboration skills; also endeavor to bring the research results to publication in international journals, and presentation in international conferences.

- (3) make progress report of their research at least once a year and also participate in education programs related to fellowship.
- (4) report the research fund usage if requested.
- (5) comply with regulations which promote sound research activities.

4. Supervisor's Participation

Supervisors are requested to act in line with the policy of this program and Kyushu University's "Da Vinci Program" which calls for collaborations between students and research supervisors — burden sharing (See the attached chart for details) and fulfill the following requirements;

- (1) Actively participate in the "Joint Seminar" where students and research supervisors of Q-Energy Fellowship gather and hold regular discussions (see Appendix 2).
- (2) Understand the importance of your student's participation in industry-academia collaborative researches, international collaboration researches, and regional collaboration researches, and support your students.
- (3) Strive to obtain external research funds and actively support your student with research funds required to promote the student's research.
(* Fellows are allowed to serve as research assistants (SRA/RA) or teaching assistants (TA) during the fellowship.)

5. Announcement

Selected fellows will be announced and listed on the university's website.

6. Fellowship Grant

- (1) Research Support grant: 2.4 million yen per year [200,000 yen per month]
- (2) Research Expenses support (for research activities): 500,000 yen per year
The fund which starts or stops in the middle of a month is calculated in accordance with the university rule.

7. Pay Period

The grant payment period is three years.
(However, the payment period may be shortened if the payment suspension/ Cancellation requirement is met.)

8. Tuition Fee Exemption

Those who are approved as fellows and reserved fellows are only exempt from tuition fees for the second semester of AY2022.
(Tuition fee exemptions from 2023 may be subject to change depending on the national budget situation.)

9. Application & Selection Guideline

(1) Application Deadline: 4th July, 2022

*Please check the administration office's deadline of your department.

(2) Application Documents

- (i) (Form1)Application Form
- (ii) (Form2)Check Sheet
- (iii) Published thesis, Master's thesis, Bachelor's thesis, and supporting research materials
- (iv) (Form3) Recommendation

(3) How to Submit

The documents (i) (ii) (iii) must be submitted through **the administration office of your department.**

(i) Form 1 must be converted to PDF and submitted.

A file name should be "Affiliation _your name" (e.g. Faculty of Economics _John Smith).

(ii) Form 2 must be converted to PDF and submitted.

A file name should be "Check Sheet _your name" (e.g. Check Sheet _John Smith).

(iii) All application materials should be converted to PDF and submitted.

These materials should be numbered in the order of priority, and the file name should be "1_your name _material name" (e.g. 1_John Smith _Master's Thesis, 2_ John Smith _Bachelor's Thesis).

(iv) For submission of a letter of recommendation, your supervisor is requested to convert the letter to PDF and upload it onto the URL below;

https://archive.iii.kyushu-u.ac.jp/public/LP-AwA1I1M9A0icBiOp_eRNx--xhd-LhLPbmtbf1bcuS

The file name should be "Recommendation_ student's name _supervisor's name" (e.g. Recommendation_ John Smith _Michael Smith).

* Make sure that all fonts are embedded in PDF and that there are no misalignment or garbled characters before submitting.

You can download an application form from the website below;

(Q-PIT URL) <https://q-pit.kyushu-u.ac.jp/fellow-ship/>

(4) Selection Process (see Fig. 4 on the appendix)

- (i) Applicants' documents are reviewed from the viewpoints of
 - "Innovation / Originality of Research Ideas",
 - "Concreteness / Feasibility of Research Plan",
 - "Dissertation and Presentation at International / Domestic Academic Conferences",
 - "Contribution to a decarbonised society",
 - "Conformity to Q-Energy Fellowship's objectives".
- (ii) Applicants who passed the document screening, are requested to give presentation of their previous research and future research plans.
There will be a question session to examine the candidate's

"Basic Knowledge in their Research Fields"

"Significance of Realizing a decarbonised Society"

"Presentation Skills which enables researchers from other fields to understand the talk"

"Research being aimed at achieving a decarbonised society"

"Suitability to the objectives of Q-Energy Fellowship"

(5) Selection Schedule (tentative)

Application Deadline	4 th July
Document screening	July~
Interview	End of August or September
Final decision	September

*Applicants will be notified individually of the results of the selection process.

(6) Handling of personal information

Names and other personal information submitted at the time of application will be used only for the purpose of this selection process and the execution of this project, and will not be used for any other purpose.

(7) Alternates

Alternates shall be selected from among those who are not certified as Fellows by the above selection. Alternates will be certified as Fellows when a vacancy occurs in the Fellowship due to withdrawal from Q-Energy Fellowship or other reasons, if they are deemed to meet the eligibility requirements for Fellowship at that time. The duration of the Fellowship shall be the number of months remaining in the predecessor's term of office.

10. Research Grant Timing

(1) Research Support Grant

Paid by bank transfer onto fellow's bank account on 21st of each month (or before 21st if it falls on Saturday, Sunday, or a holiday).

(2) Research Expenses Support (from this fellowship)

Approved amounts will be allocated in the research budget to be managed by each research supervisor.

11. Suspension / Cancellation / Return of Grant

(1) A grant may be suspended or terminated in the following events:

- If a fellow falls under item (3) in clause 2. Recruitment (Applicant Eligibility)
- If a fellow takes a leave of absence (this is not applicable if a fellow can fulfill their requirement), drop out of school, or expelled from school
- If a fellow has received disciplinary action
- If an Annual Fund Review reports that a fellow has not fulfilled their obligations.
- If it is decided that a fellow has failed to engage well enough in their study or a fellow's behavior has been improper.
- In the event of a fellow's death

- If a supervisor fails to bear the obligatory fund or does not support necessary research expenses
- (2) In case the suspended or canceled research grant has already been transferred onto a fellow's account, the fellow must immediately return the grant.

12. Resumption of Research Grant

If the reason for suspension is cleared, the grant may be resumed if it is deemed appropriate.

13. Tax Related to Research Grant

- (1) A fellow must file a tax report, since the research support allowance is treated as miscellaneous income and is subject to taxation. The taxable amount is the total amount of annual research grant (January 1st to December 31st) minus research expenses such as tuition fees. In order to file a tax report, it is necessary to record income and expenditure, and also save receipts.
- (2) A fellow is also obliged to pay "resident tax" to the municipality office of your residence (for foreign students, the tax is calculated according to the treaty between Japan and the student's home country.).

14. National Health Insurance

(1) Loss of dependent status

If a fellow has been registered as a dependent in his/her family member's health insurance, sailor insurance, or mutual aid association, and starts to make a total income of 1.3 million yen or more per year by receiving this grant, the fellow should be excluded from the dependents in such family health insurance, and he/she must join the National Health Insurance.

* Since the amount of national health insurance premium varies depending on a municipality, please check at the National Health Insurance counter of the city (ward) or town office of your residence.

* Also please advise those who have given a fellow a financial support (most probably parent) to confirm with the administration office of their workplace regarding dependents' allowances provided.

(2) Payment of National pension premiums

All residents in Japan are obliged to pay national pension premiums starting at age 20. Students will be exempted from premiums payment while they are in school if their previous year's income is below a certain level*.

If your income goes above exemption level due to the receipt of this grant, you will be obliged to pay the National Pension premium.

* a certain level is estimated:

1.18 million yen + number of dependents x 380, 000 yen + deduction of social insurance premiums

* For more details, please check at national pension counter of the city (ward) or town office of your residence.

15. Others

(1) This project may be subject to change depending on the state budget for 2022.

(2) Contact information

I²CNER · Q-PIT Office of Research Support Services

Research Support / Public Relations Group

Kashiwagi

E-mail: iq-kenkyu@jimu.kyushu-u.ac.jp

TEL: 092-802-6935 (90-7196)

(Appendix)

Program for upgrading research capability and career development

Research capability	Expected achievement / Evaluation, [toward career path]	How to evaluate	
<p>Concept & Idea / Proposal</p>	<p>Document Screening: Evaluate research proposals from the perspectives of 1. Innovation and originality of the research concept 2. Detail and feasibility of the research plan, and 3 Research dissertations and presentations at international and domestic conferences.</p> <p>Interview : Presentation of the research and future plans</p> <p>Question and answer session: Assess the understanding of the basics of related fields and social significance of realizing a carbon-free society and presentation skills to see if it was easy to understand even to researchers outside the specialty area.</p> <p>[Confirm basic capability to lead to career path]</p>	<p>fellowship selection time</p>	<p><u>Evaluate Research Plan</u> Oral screening on the research proposal: from academic, international, and social aspects (evaluation by FE) and assess the student's initial ability.</p>
<p>Comprehension on decarbonized energy and ability to see the specialty field in perspective</p>	<p>Fellows take a wide range of online lectures related to decarbonized energy and expected to learn to have full view picture of energy fields.</p> <p>[Raise awareness and provide opportunities to think about career path]</p>	<p>first Year</p>	<p>QE1 (Comprehension) Oral screening (It is recommended that students take lectures from the master's course before participating in this fellowship)</p>
<p>Ability to conduct cutting-edge research and learn from others</p>	<p>Able to make a proposal to connect their own research seeds (materials, devices, systems, social systems reform, etc.) to social needs (improvement of environment, economy, and sociality) through the experiences of presentations and discussions with students and faculty members from different fields, different grades, corporate researchers, and foreign faculty members at joint</p>	<p>every year</p>	<p>Presentation in joint seminars & discussions, and research progress in one's own laboratory <u>Performance Evaluation</u></p>

	<p>seminars and presentation meetings with industries.</p> <p>[Open up the door to academia, industry, and overseas universities]</p>		
<p>Collaboration / Concept of future society</p>	<p>Develop ability not only to deepen one's own research through hands-on experience but also to understand the challenges in realizing a decarbonized society, involve people concerned and envision the picture of future society by joining one of the following projects: 1 <u>Industry-academia collaboration research</u> — one month (or longer) internships and joint research at companies and institutes) 2 <u>international collaboration research</u> — half a year (or longer) study at a university overseas, or joint research — with non-Japanese researchers 3 <u>Regional collaboration</u> —activities inside community.</p> <p>[Gain clear picture of future career through hands-on experiences]</p>	<p>second year</p>	<p><u>Project participation</u>; Industry-academia collaboration, international collaboration, and regional collaboration research (Choose one)</p>
<p>Research ability / interdisciplinary work</p>	<p>Evaluate whether a fellow has potential to become an innovative researcher and able to carry out cutting-edge research from the perspectives of the followings.</p> <ul style="list-style-type: none"> ● <u>Interim evaluation of dissertation</u> (first half of the final year) <p>Evaluate whether the progress of research, pending issues and research plans are all clear.</p> <ul style="list-style-type: none"> ● <u>Final evaluation of dissertation</u> (second half of the final year) <ul style="list-style-type: none"> (1) Academic (originality and specialty) (2) International (internationally accepted or not) (3) Sociality (feasibility of realizing a carbon-free society) <p>This course can be completed early.</p> <p>[Dissertations with one's own career path in sight. In case of carrier at a university overseas in sight, dissertation</p>	<p>third year · final year</p>	<p><u>QE2 (Research Progress Evaluation)</u> Oral Screening on the achievement in interim research <u>FE (Doctoral Dissertation Review)</u> Examine objectively in accordance with the screening policy of each school or faculty and secure world standard papers.</p>

	must be in English and must be able to respond to questions in English]		
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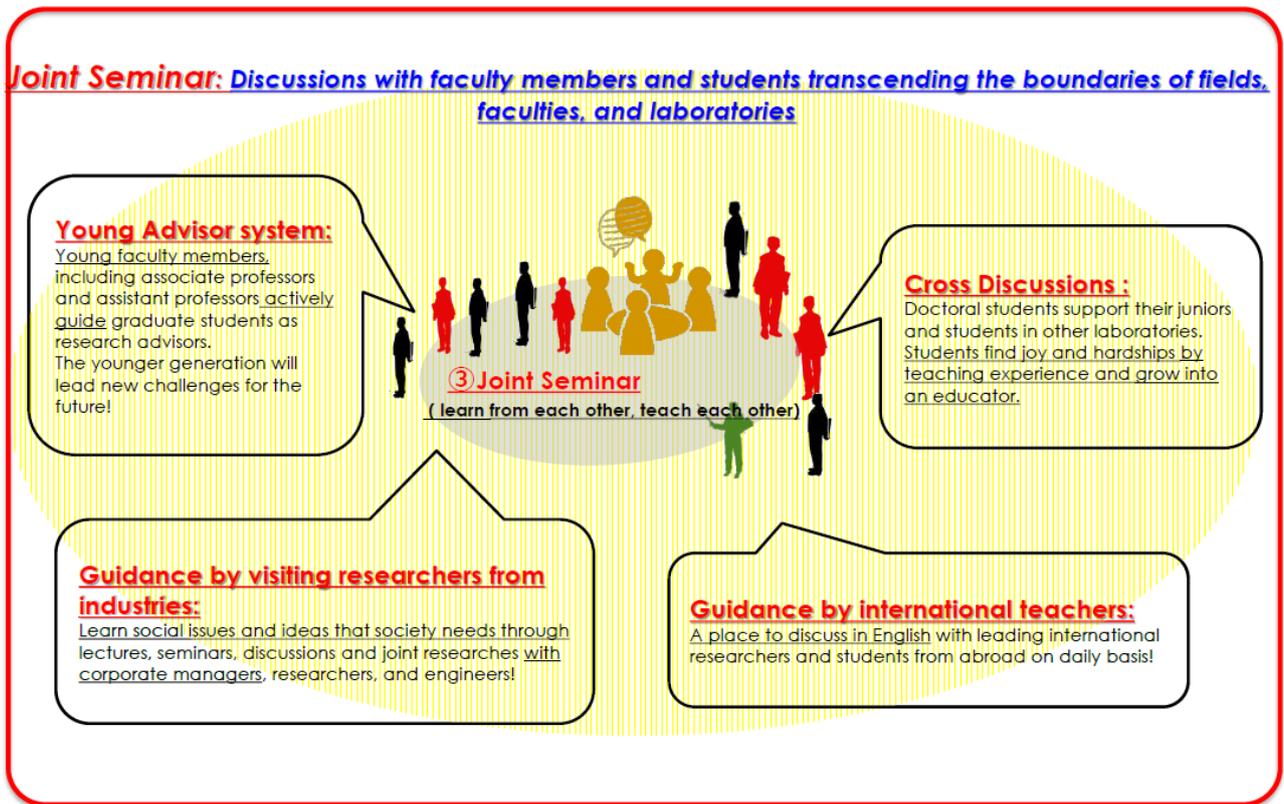


Figure 2: Joint Seminar, a place to broaden the scope and horizons of research through discussions with researchers from various fields

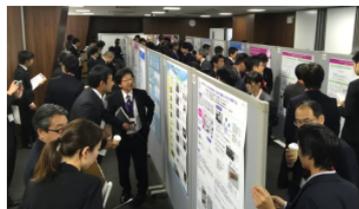
Achievement report meeting for industry: A place to directly convey the results of doctoral research to corporate engineers and researchers for discussion

Achievement report meeting for industry (held every year from 2016)
This fellowship student gives a presentation to collaborating institutions

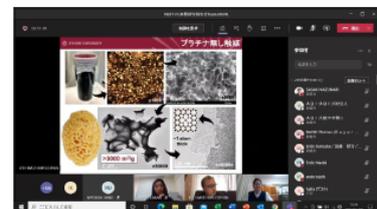
[Participating companies, etc.]
 Toyota Motor Corporation, Nissan Motor Co., Ltd., Mitsubishi Power Co., Ltd., Hitachi, Ltd., Tokyo Gas Co., Ltd., ENEOS Co., Ltd., Kyushu Electric Power Co., Inc., Saibu Gas Holdings Co., Ltd., Toshiba Energy Systems & Solutions Corporation IMURA JAPAN CO.,LTD, Miura Industry Co., Ltd., NGK Insulators, Ltd., NGK Spark Plug Co.,Ltd. Asahi Quality and Innovations Co., Ltd., Toyota Tsusho CORPORATION TOYOTA CENTRAL R&D LABS., INC. Mizuho Information Information Co., Ltd., The Institute of Energy Economics, Japan, National Research and Development Corporation, Japan Aerospace Exploration Agency, Fukuoka Prefecture, Fukuoka City, etc.
 (Collaboration with the Fukuoka Hydrogen Energy Strategy Council, in which more than 800 companies and institutions participate)



Research Result Report
 (Attendance from about 30 companies)



Poster Presentation
 (About 50 Interdisciplinary Graduate students announced for companies)



Web Report
 (Achievement report meeting will be held by web due to the Corona virus)

Figure3: A place to improve research capabilities and form a career path

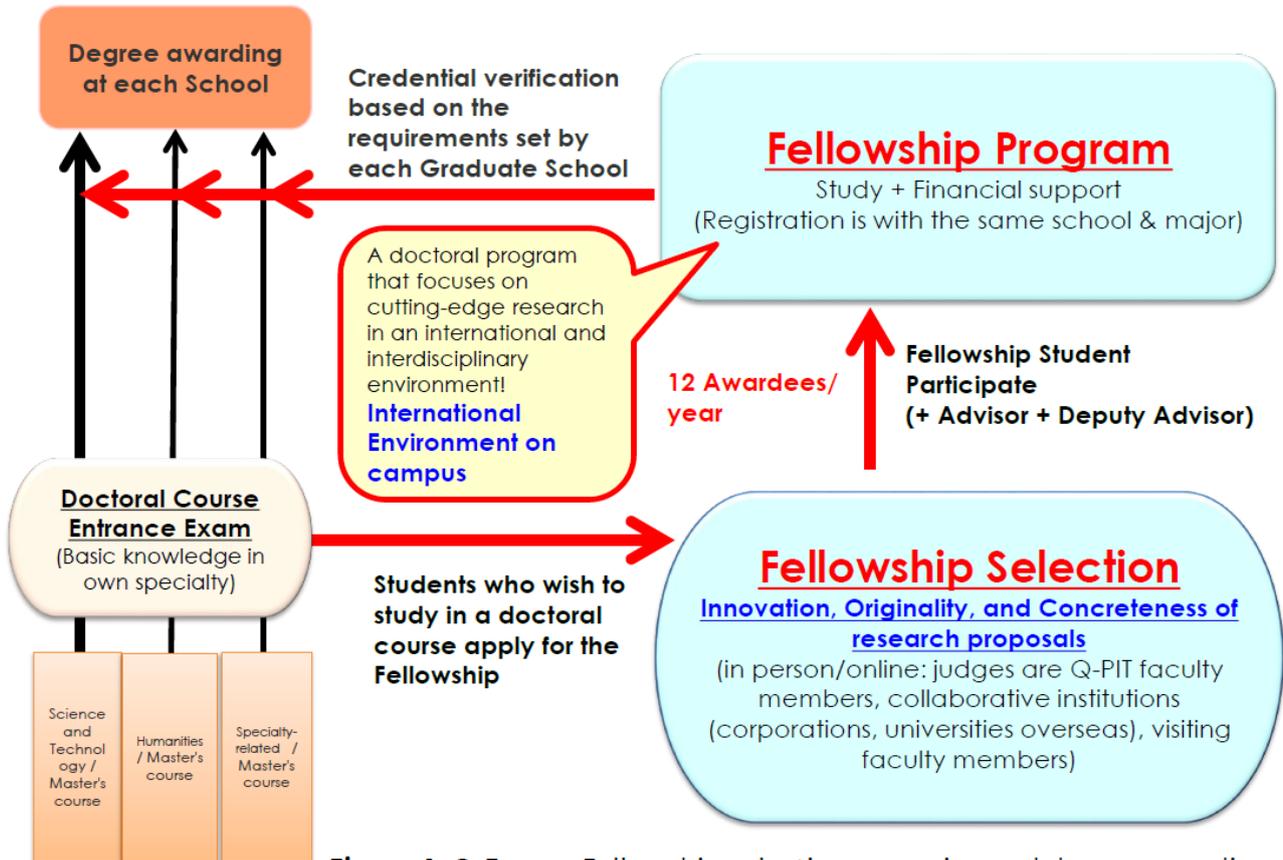


Figure 4: Q-Energy Fellowship selection screening and degree awarding