# Kyushu University Support for Pioneering Research Initiated by the Next Generation (SPRING), Future-Creation (MIRAI) Course in FY2023 October

# **Application Guidelines**

# 1. Purpose and Outline of the Project

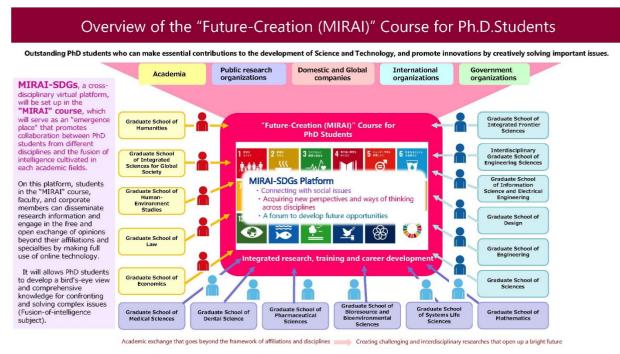
#### **Purpose**

The project "Creation of an Open Education Initiative for Developing PhD Researchers Opening Up the Future" (hereinafter referred to as the "Project") aims to foster outstanding PhD students who can make essential contributions to developing science and technology, promoting innovation by creatively solving important issues and thus opening up a bright and prosperous future of this country. This initiative is based on "Support for Pioneering Research Initiated by the Next Generation (SPRING)," a program implemented by the Japan Science and Technology Agency (JST)<sup>[1]</sup>.

This Project provides living and research expenses (hereinafter referred to as "Research Aid") to selected PhD students, which allows them to devote themselves to unrestricted, challenging and interdisciplinary research projects. In addition to their research ability, the Project fosters the students with a bird's-eye view, interdisciplinary approaches, a high degree of internationality, global mindedness. It will also provide career development training to obtain a wide range of transferable skills and support expanding career paths. Through these efforts, this Project aims to create new values and innovate the doctoral education systems of our University.

#### Overview

Highly motivated and talented PhD students will be selected beyond the conventional framework of academic disciplines. All selected students will belong to the "Future-Creation (MIRAI)" PhD course (hereinafter referred to as the "MIRAI" course), and engage in creative and interdisciplinary research. Students in the "MIRAI" course are required to participate in the open platform "MIRAI-SDGs". This is a forum where students will choose one of the 17 Goals according to their interests or research topics. On the MIRAI-SDGs platform, students can disseminate their own research and interests to joint research. Lively discussions supported by modern online tools would lead to starting up interdisciplinary joint researches among PhD students and researchers from different research fields. Students are also required to acquire interdisciplinary approaches, global mindedness, and highly transferable skills through the completion of a rich and diverse range of career development and training content.\*



**Figure 1**. Overview of the "Future-Creation (MIRAI)" course.

#### \*Career development and training content

MIRAI-SDGs, a cross-disciplinary virtual platform, will be set up in the "MIRAI" course, which will serve as an "emergence place" that promotes collaboration between PhD students from different disciplines and the fusion of intelligence cultivated in each academic fields. Through this platform, students in the "MIRAI" course (hereinafter referred to as "Course students"), faculty, and corporate members can disseminate research information and engage in the free and open exchange of opinions beyond their affiliations and specialties by making full use of online technology. This allows them to develop a bird's-eye view and comprehensive knowledge for confronting and solving complex issues (Fusion-of-intelligence courses). Furthermore, in order to develop competencies for solving cross-sectoral issues and social issues, PhD students are required to pass a comprehensive exam "Research Proposals" which is given by their supervisory committee. The purpose of the exam is to allow the student to develop a comprehensive understanding of the literature, the ability to find unsolved issues and making proposals for solving the issues, predicting results and defending proposals. It is essential that the topic of research proposals should be selected from an area that is different from their own PhD research. The course also cultivates a broad range of advanced transferable skills based on career development and training content such as "Integrated Research Project", "Interdisciplinary Courses and Sub-Major Programs", "Entrepreneurship Training Courses", "Internationality Courses", "Short-term Study Abroad and Overseas Training", "Resilience Training", "Career Development Courses", and "Internships in Business". (As a general rule, the Fusion-of-intelligence courses and Research Proposals are compulsory for Course students. Other courses are electives.)

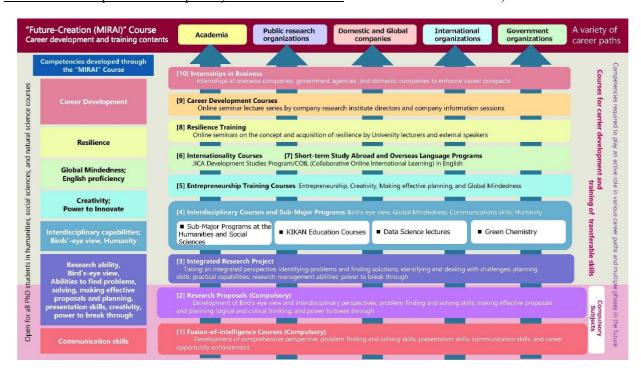


Figure 2. Career development and training content in the "Future-Creation (MIRAI)" course

#### 2. Number of students to be selected

Approximately 20 students

#### 3. Eligibility to apply

Applicants for the Project must meet all of the following requirements (1) through (3).

- (1) Those who are enrolled in graduate schools of Kyushu University as of October 1, 2023 and fall under any of the following categories (Including those expected to be).
  - (i) Those who will enter in a doctoral program as regular students with a standard course length of 3 or 4 years.
  - (ii) Those who will transfer to the third year of the five-year integrated doctoral program as regular students, or students who will advance from the second year.

- (iii) Those who enterd in a doctoral program as regular students with a standard course length of 3 or 4 years on April 1, 2023
- (iv) Those who transferred to the third year of the five-year integrated doctoral program as regular students, or students who advanced from the second year on April 1, 2023.
- (2) Those who are willing to actively participate in career development and transferable skills-development content courses, and are motivated to enhance their own abilities and potential.
- (3) Those who do not fall under any of the following categories as of October 1,2023.
  - (i) Those appointed as fellows of the Kyushu University Innovator Fellowship and their applicants.
  - (ii) Students enrolled in the Graduate Program of Mathematics for Innovation.
  - (iii) Students enrolled in the Program for Leading Graduate Schools.
  - (iv) Those appointed as research fellows of the Japan Society for the Promotion of Science (JSPS)
  - (v) Those who receive scholarships, etc., from the national government, private organizations, or other bodies (hereinafter referred to as "the national government, etc.") and are not permitted by the national government, etc., to receive financial assistance apart from the said scholarships, etc.
  - (vi) Those receiving a Japanese Government (Monbukagakusho: MEXT) Scholarship for international students
  - (vii) International students receiving scholarships or other support from their home countries.
  - (viii) Those who are recognized as having stable income exceeding 2.4 million yen from the University, a company, or other organization, or from their own business, including salary, executive remuneration, etc.
    - (ix) Those who are receiving financial aid from other educational programs at Kyushu University and have not obtained approval from the relevant program director to apply for this Project. Note: It is possible to receive a Japan Student Services Organization (JASSO) scholarship and Research Aid at the same time.
    - (x) Students on a leave of absence.

# 4. Obligations as a Course student

Course students have the following obligations.

- (1) Students must take lectures provided by the "MIRAI" course (the Fusion-of-intelligence courses and Research Proposals (compulsory) and two elective subjects.)
- (2) In addition to their excellent research abilities, students must strive to develop a bird's-eye view, interdisciplinary research skills, internationality, and a wide range of advanced transferable skills by actively participating in course subjects.
- (3) Students must devote themselves to study and research based on a predetermined research plan.
- (4) Students must submit a yearly report to the Project Director on the progress of the course work and research, including a description of research expenses. When requested by the Project Director, students must report as required on matters such as the progress of the research and the use of research expenses.
- (5) When conducting research, students must comply with the rules and regulations established by the University and strive to carry out research activities that meet the trust and expectations of society, in accordance with their own conscience and decency. Furthermore, students must fully recognize that the source of research funds is public funds, comply with relevant laws and regulations, and strive to carry out research efficiently.
- (6) Students must attend research ethics education and compliance education classes as designated by the University.
- (7) When presenting the research results obtained through the Project, students must indicate that the research was subsidized under the Project.
  - \*Examples of acknowledgments in the treatise (Grant No. is JPMJSP2136).
  - [Example] This work was supported by JST SPRING, Grant Number JPMJSP2136.
- (8) In order to verify the effect of the career development and training content, students must cooperate with the career tracking survey conducted by the University for approximately 10 years after the completion of this course.

#### 5. Publication of names

The names and student ID numbers of Course students will be published on the SPRING website.

# 6. Cooperation and contribution of academic advisors and faculty members

In this program, we request the following cooperation and contributions from academic advisors and faculty members of the school to which the course students belong.

- (1) The academic advisor understands and agrees with the purpose of the program, and supports the students' coursework and activities, including budget management.
- (2) The academic advisor and the faculty members of the school to which the course students belong actively attend online presentations and discussion meetings in the Fusion-of-Intelligence subject, activate the exchange of opinions of course students and promote interdisciplinary research. Also, each faculty member plays the role of a mentor for the MIRAI-course students.
- (3) Your academic advisor is required to guarantee the portability of course students required in this program.
- (4) Research proposals (comprehensive exam, required subjects) must be conducted at the school to which the course students belong, and training and tutoring must be provided for the course students. The implementation procedure of the research proposals will be announced separately from the school to which the course students belong.

# 7. Amount of Research Aid (for the 2023 academic year)

- (1) Living expenses equivalent: 200,000 yen per month
- (2) Research expenses (used for interdisciplinary and integrated research activities in this Project): maximum amount of 500,000 yen.
  - \* Regarding research expenses, the contents of the application plan and the budget amount will be assessed, and the amount to be paid will be determined within the range of a maximum of 500,000 yen per year. \*If the payment of research incentives is started or stopped in the middle of the month, the amount of payment for the month will be based on the standards set by the University.
  - \*For international students who have not yet entered Japan, the month they arrive in Japan is the month they start receiving the living expenses. No payment can be made for the period from October, when the course student is approved, to the time of entry into Japan. Research expenses will be allocated after the student's arrival in Japan, so that student will be able to purchase goods from the date of student's arrival.

#### 8. Payment period

A period within the standard period of study (for example, if the student will be a first-year student in a three-year doctoral course as of October 2023, the maximum remaining payment period is three years)

\*However, in cases of the suspension or revocation of the Research Aid, the payment period may be shortened.

# 9. Application procedures and selection

- (1)Application period: Required for both 1) and 2), and applications from those without pre-entry will not be accepted.
  - 1) Pre-entry Period: From Monday, July 3rd to Noon Monday, July 24th, 2023
- 2) Application Period: From Monday, July 24th to Noon Thursday, August 3rd, 2023

#### (2)Application method:

- 1) Access the Pre-entry form URL below, fill in the required information, and complete the form. 
  [Pre-entry Form URL] https://forms.office.com/r/0jPWgeD1T5
- 2)Access the following application URL, enter the necessary information, convert (i) application form (Form1) into a PDF file and (ii) research expenses form (Form2) in Excel file as itself, then upload the files to the specified URL below.

The file name should be "Graduate school (you'll be enrolled)\_full name" (example: "Graduate school of Engineering Kyudai Taro"). No documents will be submitted or modified after the application period.

#### [Submission URL]

https://archive.iii.kyushu-u.ac.jp/public/Tq4jA1FJI9JxcAh1XUmxNMdk-xWC uDP Qr6nTp nXuW

### **Application documents**

- (i) Application form [Word file]
- (ii) Research Expenses Form [Excel file]

The following documents ((iii) Evaluation report) should be prepared by the applicant's academic advisor. The academic advisor will convert the evaluation report into a PDF file and then upload it directly to the specified URL by him/herself.

(iii) Evaluation report for applicants [Word file]

[For submitting evaluation reports URL] <a href="https://forms.office.com/r/tjEAYz6pHM">https://forms.office.com/r/tjEAYz6pHM</a>

Please download the application forms from the below.

[Documents download URL]

https://archive.iii.kyushu-u.ac.jp/public/PqoiAp8JY8JDTQXi7bDdpGt5X X7OhJQsYBKIEwoxy06

#### (3) Selection process

The selection will be made according to the purpose of the Project, which is to "strengthen support for outstanding and motivated doctoral students who will play a leading role in the future of science, technology, and innovation in Japan." based on the 【Selection prespectives】 described below, using the methods described in (1) to (3).

#### [Selection perspectives]

- (i) The applicant must have aspirations and abilities to be directly involved in the creation of science, technology, and innovation in Japan after completing the doctoral program, and must have a concrete vision for his/her own career plan, future plans, and how he/she will be involved in science, technology, and innovation in Japan.
- (ii) In the application form, the background and purpose of the doctoral research should be presented in a way that can be understood by non-specialist researchers, and the research idea should be excellent. Applicants should demonstrate originality in the research methodology and indicate future prospects for the research topic.
- (iii) Applicants should have a specific plan for interdisciplinary research with other research fields in the Course, based on the self-analysis of their own ability to conduct research (strengths and factors considered necessary for their future development as researchers).
- (1) Based on the documents submitted, each applicant's application form will be reviewed in one of the four categories: 1) Humanities and Social Sciences, 2) Science and Engineering, 3) Biology (Medicine, Dentistry, Pharmacy, and Agriculture), and 4) Integrated Disciplines (Information, Environment, and Interdisciplinary fields) and decision will be made on whether to accept or reject the document screening.
- (2) Applicants who are selected for the interview screening will be given an oral examination based on the submitted documents and decision will be made on whether to accept or reject the interview screening.
- (3) Successful applicants who pass the document screening and interview screening will be selected as course students.

#### (4) Selection schedule

July 24th Pre-Entry Form deadline August 3rd Application deadline

August 4th to October 19th\* Conducting document screening

October 20th\* Notify applicant of acceptance or rejection of document screening

October 26th\* Conducting interview screening (oral examination)

October 30th\* Course students are determined (To be announced on our website)

# 10. Payment of Research Aid

# (1) Living expenses

Payment will be made on the 21st of each month (if that day falls on a Saturday, Sunday, or a national holiday, payment will be made on the business day immediately preceding that day) by transfer to the account designated by the Course student.

#### (2) Research expenses

The amount of research expenses approved will be allocated to the budget managed by the student's academic advisor.

Note: For international students who have not yet entered Japan, the month they arrive in Japan is the month they start receiving the living expenses. No payment can be made for the period from October, when the course student is approved, to the time of entry into Japan. Research expenses will be allocated after the student's arrival in Japan, so that student will be able to purchase goods from the date of student's arrival.

# 11. Suspension, cancellation, and return of Research Aid

- (1) If any of the following situations arise, then the provision and expenditure of Research Aid will be suspended, or the status of the Course student will be revoked.
  - 1) If the student falls under any of the categories set forth in 3. Eligibility to apply (3)
  - 2) If the student takes a leave of absence, withdraws, or is expelled from the Course
  - 3) In the event of death
  - 4) In the event of disciplinary action
  - 5) If, in the review conducted each year for the continuation of payments, the Course student is found not to have fulfilled their obligations
  - 6) If a student is found to be unqualified as a Course student; for example, if the student is not devoted to their studies or research, failure to meet submission deadlines, or if their attitude and conduct is poor
  - 7) In addition to the above, when a student has difficulty in research or activities as a course student due to circumstances such as childbirth or childcare
- (2) If the suspended or revoked Research Aid has already been transferred or used, then the Course student must promptly return it.

# 12. Resumption of the payment of Research Aid

With respect to a person whose Research Aid has been suspended, the payment may be resumed when the reason for the suspension has ceased to exist and it is deemed appropriate for the student to receive the Research Aid again.

#### 13. Tax Return

- (1) The amount equivalent to living expenses is treated as miscellaneous income subject to taxation, and the course students themselves must file a tax return. The amount of taxable income is the balance after deducting tuition and other research expenses as necessary expenses from the amount of research aid (living expenses) received during the year (January 1 to December 31). In order to file a final income tax return, it is necessary to keep records of income and expenditure and to preserve evidence such as receipts. For more information on tax returns, please refer to the National Tax Agency website.
- (2) Depending on the amount of taxable income, you are obliged to pay "Resident tax" to the municipality where you live.

Note: In the case of international students, the tax treatment may differ depending on the tax treaty between Japan and the student's home country.

<sup>\*</sup>Note: This is the provisional schedule and is subject to change.

# 14. Handling National Health Insurance etc,.

(1) Loss of Dependent Requirements for National Health Insurance, etc.

If a course student is enrolled in his/her family's health insurance, seamen's insurance, or a mutual aid association as a dependent, and if he/she receives an amount equivalent to living expenses and starts earning a constant income of 1.3 million yen or more per year, he/she will no longer be a dependent of his/her family's health insurance, etc. and will be required to enroll in the National Health Insurance. (Note) The amount of National Health Insurance premiums varies depending on the municipality, so please check with the National Health Insurance office at the city (ward) office or town hall where you live. (Note) Tell the person who support you as a dependent (parent, etc.) to check with his/her workplace about his/her handling of dependent care benefits, etc.

(2) Payment of National Pension Insurance Premiums

In principle, all people between the ages of 20 and 60 who live in Japan are insured under the National Pension Plan and are required to pay National Pension Plan premiums. Students are allowed to defer payment of the premiums if their income for the previous year is below a certain level (\*) under the "Special Student Payment System".

If the student is no longer eligible for the deferment under the "Special Student Payment System" due to receiving an amount equivalent to living expenses, the student will be obliged to pay the National Pension Insurance premiums.

(\*) The income of the person for the previous year is below a certain level.

Approximate amount: 1,280,000 yen + number of dependents x 380,000 yen + deduction for social insurance premiums, etc.

Note:For specific National Pension Insurance procedures, please contact the National Pension Office at the city (ward) office or town hall where you live.

#### 15. Contact

The SPRING program office

Email: jisecho@jimu.kyushu-u.ac.jp

Note: We will not be able to respond to any inquiries regarding the screening results.

#### [1] JST SPRING Application guidelines:

https://www.jst.go.jp/jisedai/dl/application-guideline-2021.pdf

**FAQ** 

https://www.jst.go.jp/jisedai/dl/faq-2021.pdf

# Attached Table ("Future-Creation (MIRAI)" course)

# I. Course requirements

In this course, Students must complete the compulsory subjects of [1] and [2], and 2 or more subjects from the elective subjects of [3] to [10].

- (1) Course category [1] Fusion-of-Intelligence Courses (Compulsory)
- (2) Course category [2] Research Proposals (Compulsory)
- (3) At least two courses from the following elective course categories: Integrated Research Project, Interdisciplinary Courses and Sub-Major Programs, Entrepreneurship Training Courses, Internationality Courses, Short-term Study Abroad and Overseas Training, Resilience Training, Career Development Courses, and internships.

II. Course subjects

Course group	Course name	Elective or compulsory
[1] Fusion-of-Intelligence Courses	Creative Development Courses	Compulsory
[2] Research Proposals	Research Proposals	Compulsory
[3] Integrated Research Project	Integrated ResearchProject	Elective
[4] Interdisciplinary Courses and Sub-Major Programs	Sub-Major Programs at the Humanities and Social Sciences	Elective
	Graduate School KIKAN Education Courses	Elective
	Data Science Course, Sub-Major Program	Elective
	Green Chemistry	Elective
[5] Entrepreneurship Training Courses	Courses offered by the Robert T. Huang Entrepreneurship Center	Elective
[6] Internationality Courses	(I) Fusion-of-Intelligence Courses (3min video, English language version)	Elective
	(II) The "Understanding Japan" graduate school partner program developed by JICA	Elective
	(III) COIL-style Education	Elective
	(IV) Kyushu U 3MT competiton	Elective
[7] Short-term Study Abroad and Overseas Training	Short-term Study Abroad and Overseas Training	Elective
[8] Resilience Training	Resilience Training Courses	Elective
[9] Career Development Courses	Career Development Courses	Elective
[10] Internship	Internship	Elective