



TOHOKU  
UNIVERSITY



# GP-RSS

International Joint Graduate Program in Resilience and Safety Studies

災害科学・安全学国際共同大学院

**Prospective Students Information**

# International Joint Graduate Program in Resilience and Safety Studies

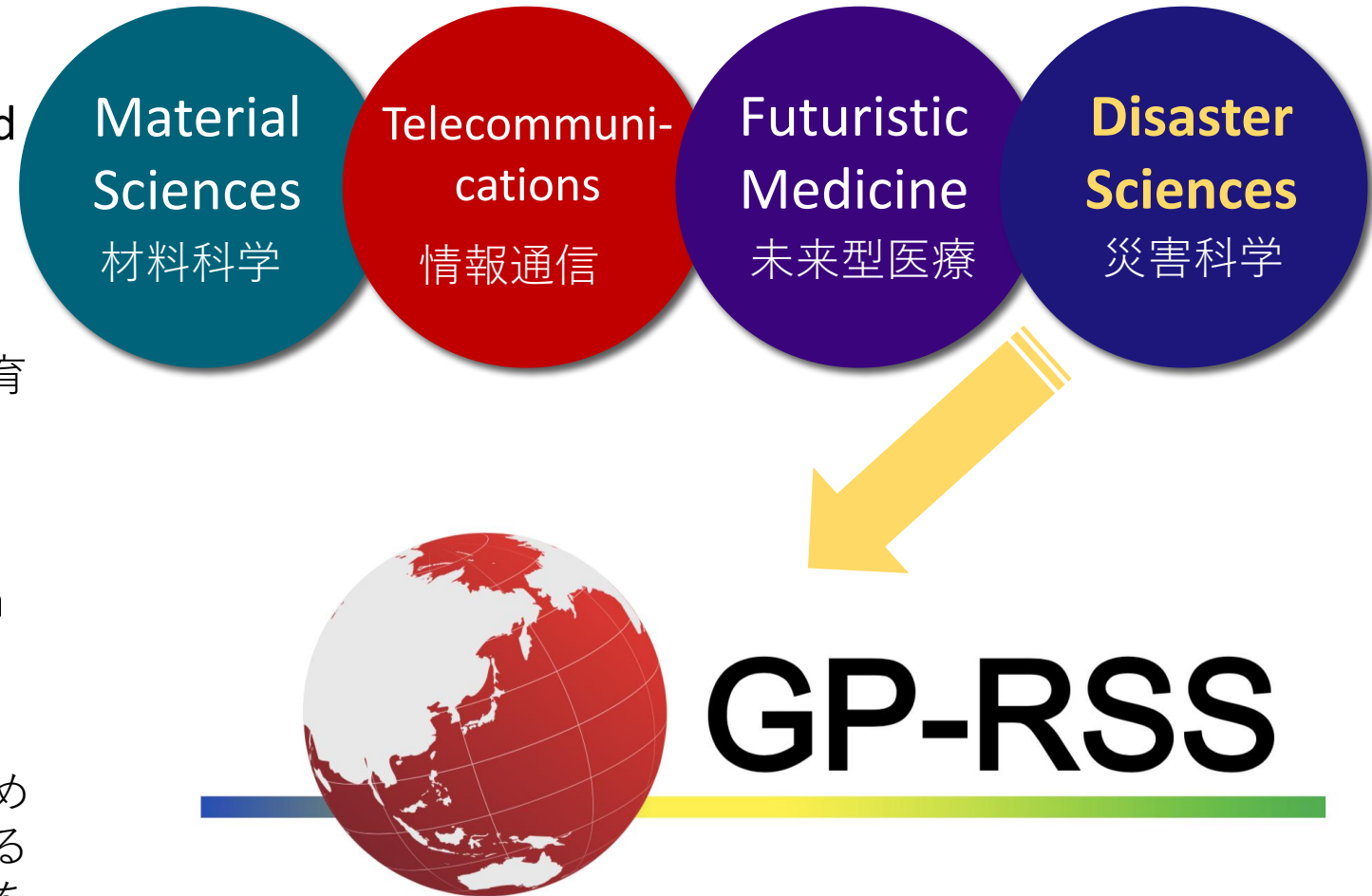
Who are we? 災害科学・安全学国際共同プログラムについて

- The **GP-RSS** is a Ph.D. program sponsored by MEXT with a focus on **international education** in Disaster Sciences at Tohoku University.

GP-RSSは、東北大学で災害科学の国際教育に重点を置いた文部科学省（MEXT）支援の博士課程プログラムです。

- We are unique in our efforts to provide a **transdisciplinary** research platform for international collaboration.

本プログラムは、国際的な共同研究のための学際的な研究プラットフォームを提供する取り組みにおいて、他に類を見ない独自性を持っています。



International Joint Graduate Program in Resilience and Safety Studies

# Research and Education Objectives on Resilience and Safety

What do we seek?

レジリエンスと安全に向けた研究・教育目標

We encourage **collaboration**, both at an academic discipline level, and at an international level of research.

私たちは学問分野の枠を超えた協力と、国際的な研究レベルでの連携の双方を推進しています。

Our program encompasses a broad range of research in socio-environmental adaptations that build on foundations of disaster science and human security.

We care about transdisciplinary perspectives that promote **societal resilience**.

プログラムでは災害科学と人間の安全保障を基盤とし、社会環境の適応に関する幅広い研究を含んでいます。

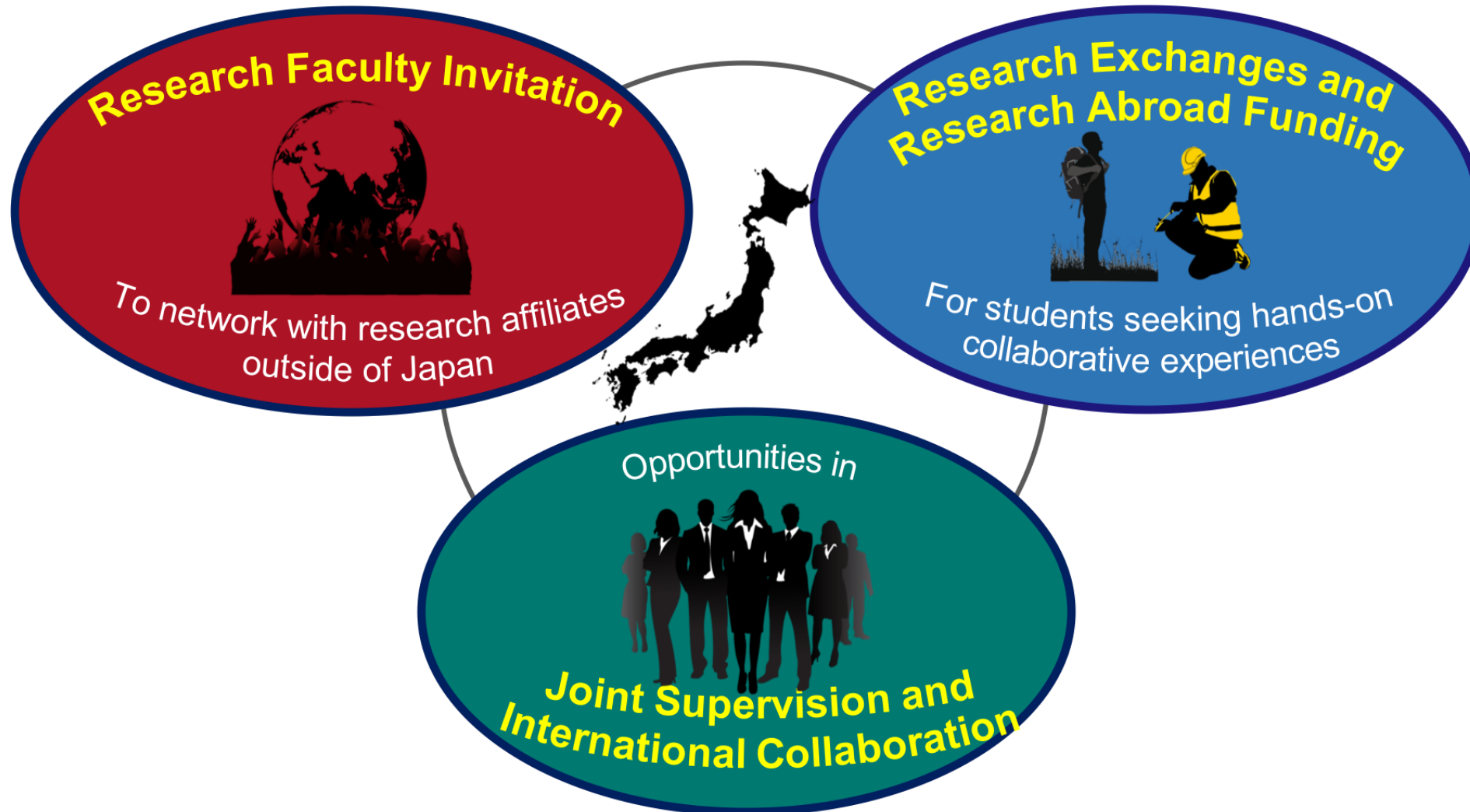
また、社会のレジリエンスを促進する学問を超えた視点を重視しています。



# GP-RSS Program Design

Offering various types of research invitations, exchanges, and joint collaborations

多様な研究の招待・交流・共同協力の提供

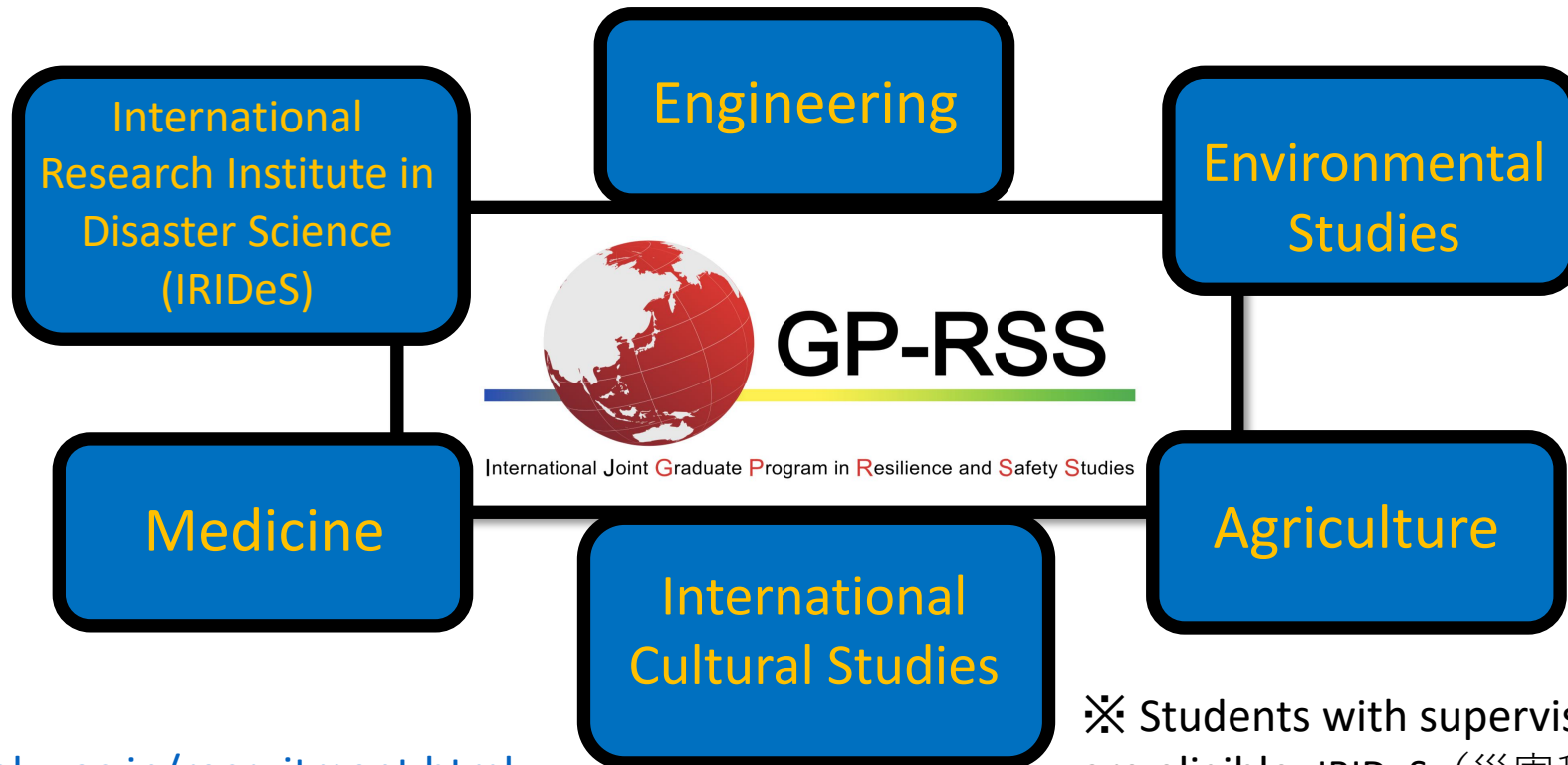


# GP-RSS Admissions: Who can apply? ①

## GP-RSS入学案内：出願資格について

- Masters students from our six constituent graduate schools who have been accepted as a Tohoku University graduate student.

東北大学の大学院生で、以下のいずれかの大学院に所属する修士課程の学生



<http://gp-rss.tohoku.ac.jp/recruitment.html>

※ Students with supervisors from IRIDeS faculty are eligible. IRIDeS（災害科学国際研究所）の教員が指導教員である学生は対象となります。

# GP-RSS Admissions: Who can apply?②

## GP-RSS入学案内：出願資格について

- Students with a **STRONG** recommendation from their Ph.D. supervisor, who intend to apply to the **JSPS Doctoral Research Fellowship DC1 or DC2**  
日本学術振興会特別研究員（DC1/DC2）への応募を予定しており、博士課程指導教員から強く推薦されていること。
- The GP-RSS application format is based on the JSPS DC1/DC2 application  
GP-RSSの応募様式は、日本学術振興会特別研究員（DC1/DC2）の申請書様式に準じます。
- The International Joint Graduate Program of the Tohoku University Advanced Graduate School promotes the JSPS Doctoral Research Fellowship  
東北大学国際共同大学院プログラムは、日本学術振興会特別研究員制度（DC1/DC2）への応募を推進しています。

For further information, please visit: <http://gp-rss.tohoku.ac.jp/>



# GP-RSS Admissions: Who can apply?③

## GP-RSS入学案内：出願資格について

- Students intending to **collaborate internationally** throughout their Ph.D.  
博士課程を通じて国際的な共同研究に取り組む意欲のある学生
  - An unique feature of our Ph.D. curriculum is a **six month doctoral research residency** with an overseas affiliate. We select our students based on their abilities to plan and deliver on international research collaboration. We recommend that you **discuss with your Ph.D. supervisor** prior to application whether this is a good course of action for your Ph.D. project.  
本プログラムの特色のひとつは、海外の提携機関で行う6か月間の博士海外研修です。国際共同研究を自ら計画・実行できる能力を重視して学生を選抜します。出願前に、本プログラムがご自身の博士研究に適しているか指導教員と十分にご相談ください。
- GP-RSS students are required to undergo rigorous **Qualification Examinations** to ensure that they are on-track in their Ph.D. We do not offer extended funding to students who extend their Ph.D.s.

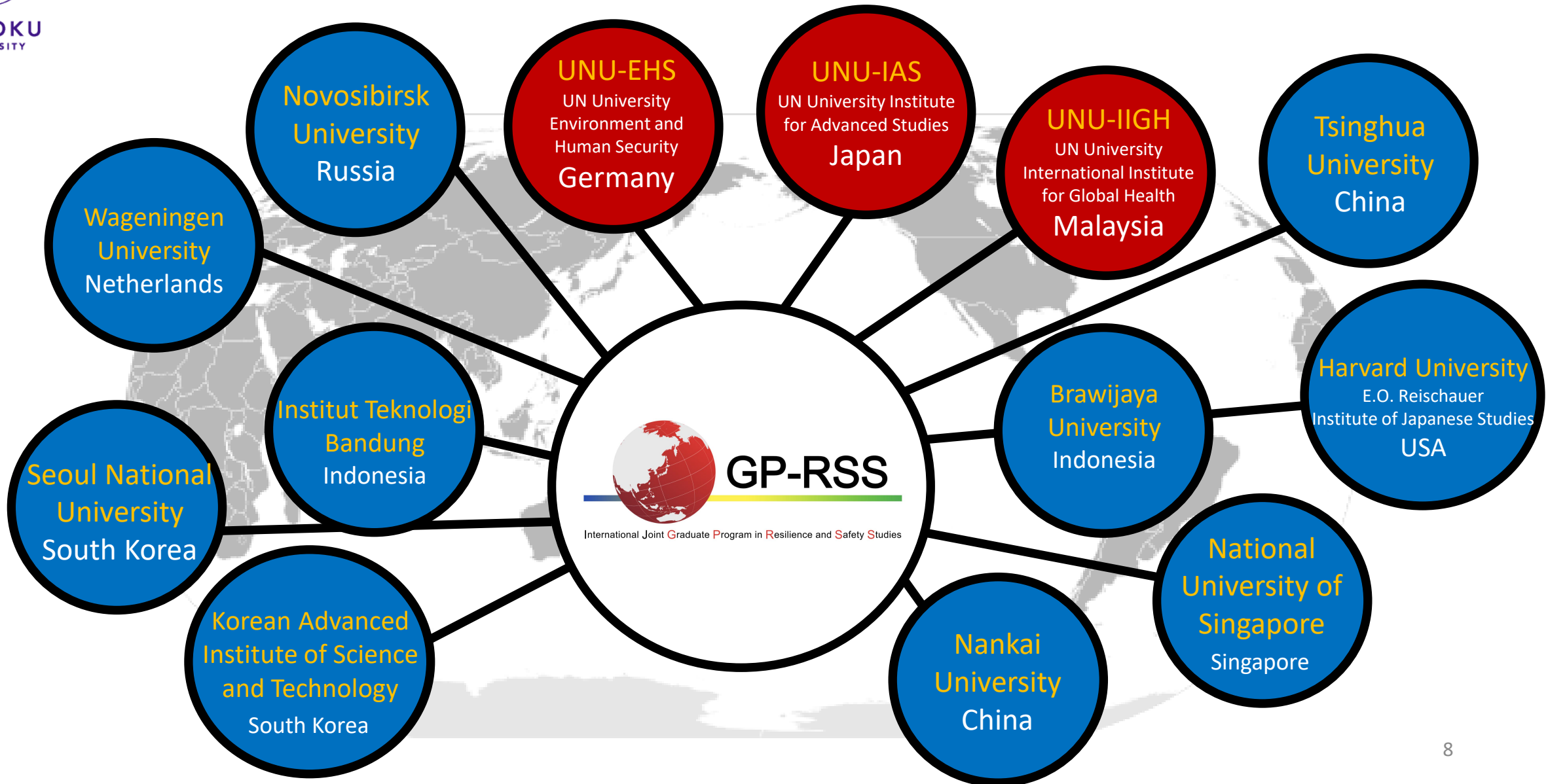
GP-RSSプログラムでは、博士課程の進捗状況を確認するための資格審査を課しています。また、博士課程の延長に対する追加の財政支援は行っておりません。



TOHOKU  
UNIVERSITY

# GP-RSS Network of International Collaboration

国際連携ネットワーク





# GP-RSS Research Areas 研究分野

An excerpt of ongoing research projects within the GP-RSS

## Post-Disaster Resilience

- Post-disaster epidemiology (WHO / UN)
- Cluster approaches to large-scale disaster medical care
- Modeling mechanisms of woody debris export
- Post-disaster and disaster-preventative solid waste management
- Comparative resilience curves between developed and developing nations

## Efforts Toward Achieving SDGs

- Developing disinfection infrastructures to combat microbial pathogens in water systems
- Theoretical models on implementation and achievement paths toward SDGs
- Policy implications on gender inequality issues in developing nations
- Reception and integration assessments of migrants and refugees

## Assessing threats to Global Security

- Cost-benefit / time-series analyses on human security risk events
- Expedient and long-term assessment of food safety risks

## Prediction of Natural and Anthropological Disasters

- Comparative modeling of disaster relief efforts between developed and developing nations
- Mapping and characterization of urban flood areas

## Technological Innovation Toward Resilience

- Mitigating hazards by using machine-learning for metadata identification of Tsunami deposits
- Metadata and API development for disaster event mass-archives

# Ph.D. Topics of Our Students

An excerpt of ongoing research projects within the GP-RSS

研究プロジェクト抜粋

## Medicine

- Development and implementation of vaccines for respiratory viruses
- Investigating genetic and epidemiological mechanisms underlying infectious diseases
- Building public health prediction models
- Machine learning predictions of postpartum depression

## Social Sciences and Education

- Diversifying food delivery systems through insurance of food and agricultural safety
- Re-examining conventional practices that effect local and global import/export policies
- Introducing comparative international education policy-making models to remedy current lack of SDG understanding in Japanese environmental education

## Environmental Engineering

- Improvement of waste management and recycling practices in mining
- Life Cycle Assessments and informed policy-making
- Adaptive urban planning in predicted areas of disaster
- Socio-economic assessments of green remediation
- Development of low-carbon resource management

## Biological Sciences

- Development of bacteriophages found in organically farmed rice to combat pesticide-resistant strains of bacteria that instigate mass infection events
- Investigating causal mechanisms of mastitis in agricultural bovine and development of antibiotic-independent countermeasures to ensure safety of dairy

# Opportunities with The GP-RSS

参画と連携の機会

Summer Schools and Workshops with  
invitational lectures by our program affiliates



Intensive core subjects that showcase cutting edge research  
in broad topics of societal resilience



Electives taught by faculty at Tohoku University  
who dedicate their research to disasters, safety,  
and resilience



Guest lectures and talks by leading researchers from around the world

**Make international collaboration a part of your Ph.D.**  
– connect with likeminded students at Tohoku University



# GP-RSS Educational Objectives 教育目標

Basic knowledge and application skills in  
Disaster and Safety Sciences

災害科学・安全学分野における基礎基盤知識と応用する能力

**A deep understanding of  
their study discipline**

Multidimensional perspectives of  
Disaster, Resilience, and Safety Sciences

災害科学・安全学分野における既存の枠組みを踏まえつつ、  
幅広い視野から多角的に捉える能力

**Multi-disciplinary  
perspectives**

Interactive and cooperative attitudes  
toward Disaster and Safety Sciences based  
in problem-based learning

災害科学・安全学分野において対話型協働能力の習得と  
実践課題解決の能力

**Trans-disciplinary  
implementation**

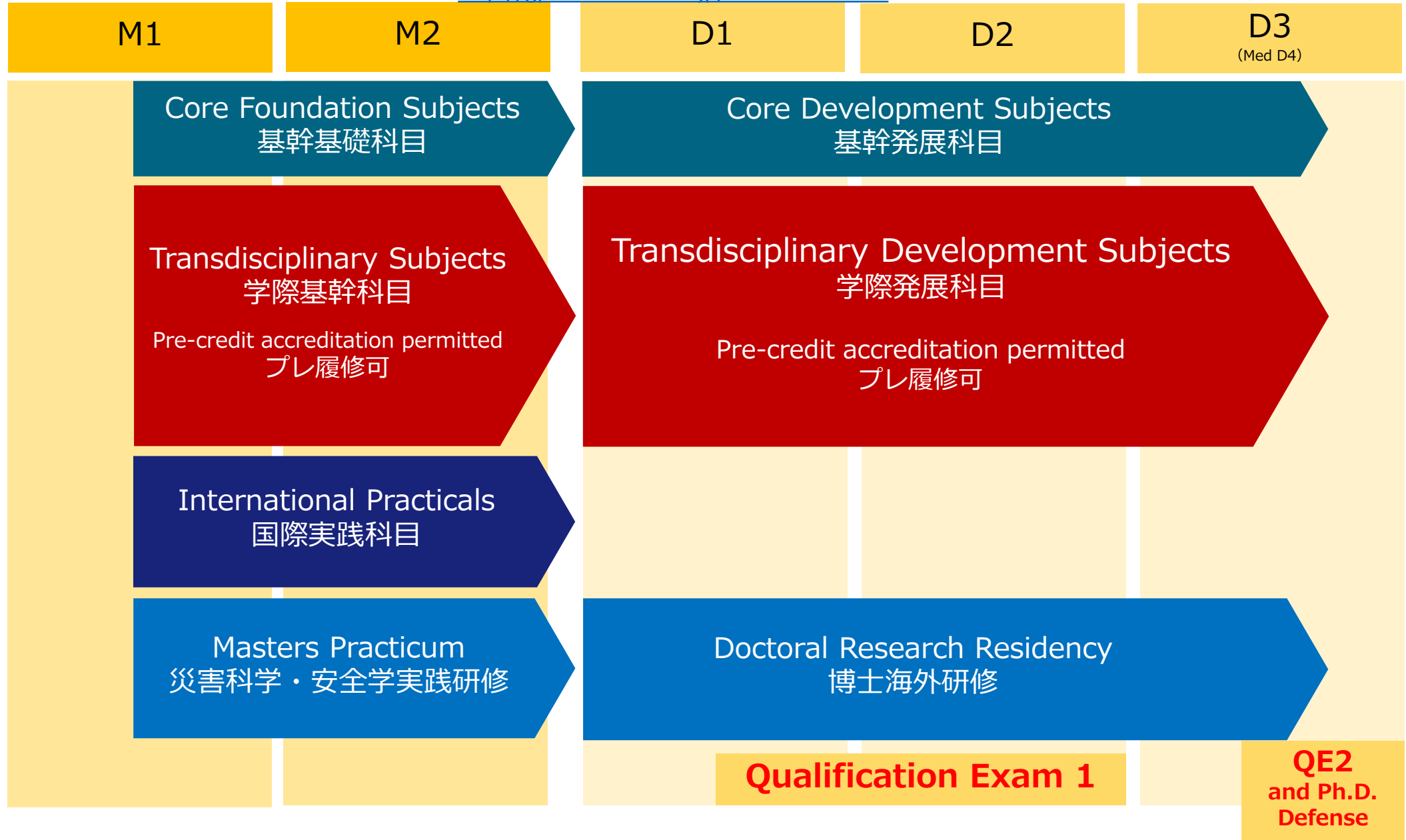
Building upon hands-on international  
research experience and developing global  
communication skills

国際的視座と現地密着滞在型の研究交流経験を有し、その知見に立  
脚しながら研究成果を発信し、国際的に活躍できる能力

**Internationally-minded  
research performance**

# GP-RSS Curriculum

<http://gp-rss.tohoku.ac.jp/curriculum.html>





# Qualification Examination 1 (QE1)

- MC-entry students
  - Meet the requirements of your graduate school for a master's degree  
所属研究科の修了要件を満たしていること
  - Complete the GP-RSS MC curriculum program requirements  
博士前期課程・修士課程におけるGP-RSSプログラム科目の修了要件を満たしていること
  - Successful defense of your master's thesis  
所属研究科の修士論文審査に合格すること
- ALL STUDENTS (including DC-entry students)
  - Oral presentation + research portfolio (in English)  
英語による口述試験＋研究ポートフォリオ
    - > All students will be examined for their research progress and doctoral research residency plans  
研究の進捗報告、博士海外研修計画についての評価
    - > Advanced DC students (including second semester M2 entry students) will be particularly reviewed on their doctoral research residency plans  
(M2後期出願を含む) DC特例生は、博士海外研修について特に厳しい審査の対象となる。



# Qualification Examination 2 (QE2)

(During D3, Med D4, or at the time of your dissertation defense)

- Meet your graduate school requirements for a doctoral degree  
所属研究科の修了要件を満たしていること
- Must complete all GP-RSS DC curriculum requirements and overseas training before the final semester  
博士後期課程におけるプログラム科目の修了要件および博士海外研修を満たしていること
- Successful defense of your doctoral thesis  
所属研究科の博士論文審査に合格すること
- Advanced DC students (including second semester M2 entry students)
  - Additional 6 Transdisciplinary Subject credits  
DC特例生は、通常の後期課程履修要件に加え6単位以上「学際発展科目」を履修すること
- Students are encouraged to fulfill their credit requirements by their penultimate semester  
修了に必要な単位は、卒業時期の1学期前（半年前）までに履修することを心がけてください

# International Practica

## 海外研修

- **MC students:** Masters Practicum, 1-2 week equivalent of research exchange (summer or winter schools). Some activities are advertised through the GP-RSS, but students are also encouraged to seek research exchange opportunities in line with their research interests, which the program may accredit.  
**博士前期課程**：「災害科学・安全学実践研修」1-2週間相当の研究交流（サマー・ウィンタースクール）への参加が必修です。GP-RSSからの案内もありますが、ご自身の研究に近い研修に参加いただき、単位認定することも可能です。
- **DC Students:** A total of six months or more of overseas research activity is required. This can be completed as six consecutive months, one month six times, two months three times, or three months two times (8 credits).  
**博士後期課程**：海外での研究活動を合計6か月以上行うことが求められます。連続6か月、1か月を6回、2か月を3回、3か月を2回など、分けて実施することも可能です（8単位）
- **Please consult with the GP-RSS prior to any research activity you seek accreditation.**  
単位認定の伴う研究活動については、事前に事務局にご相談ください。

# GP-RSS Student Financial Support

## 経済支援

MC and Declared Ph.D.  
Students 博士前期課程

Research Assistantship :  
Up to ¥1,560,000 / year  
RA雇用による支援：年間156万円

DC and medical Ph.D. students  
博士後期課程

- AGS RISE Program : Up to ¥2,400,000 / year
- JSPS DC1/DC2 Doctoral Research Fellows :  
Additional ¥600,000 / year  
学振に採用された場合：年間 60万円 (RA雇用)
- Travel : up to 150,000 yen per month for up to 6 months  
travel support upon application and review  
最大で月額15万円を最長 6 か月間支給。  
※渡航支援は申請および審査のうえ決定されます。

- All financial support are subject to annual budgetary review, and may change at any time  
経済的支援は、毎年予算の見直しによって変更される可能性があります。
- Eligible students may be recommended by the program for additional support through alternative fellowships  
プログラムでは、該当する学生に対し、他のフェローシップを通じた追加支援を推薦する場合があります。

# GP-RSS Student Financial Support 経済支援

DC and medical Ph.D. students / 博士後期課程

Travel expense support has been revised from this fiscal year.  
旅費支援について今年度より変更があります。

## 【Former】

One-time budget of ¥350,000, and subsequent travel support upon application and review



## 【From May 2025】

"up to 150,000 yen per month for up to 6 months travel support upon application and review

Decide travel destination  
渡航先の決定

Submit travel plans to GP-RSS Secretariat  
渡航計画をGP-RSS事務局に提出

GP-RSS Secretariat will adjust the given amount of financial support <sup>\*,\*\*</sup>  
GP-RSS事務局にて支援金額を調整

*\*The amount of support per month varies depending on your travel destination, place of stay, etc.*

*\*\*In expensive places such as New York, Los Angeles, London, and Singapore, the maximum amount is 150,000 yen. In Asian countries where prices are relatively low, financial supports start from 100,000 yen.*

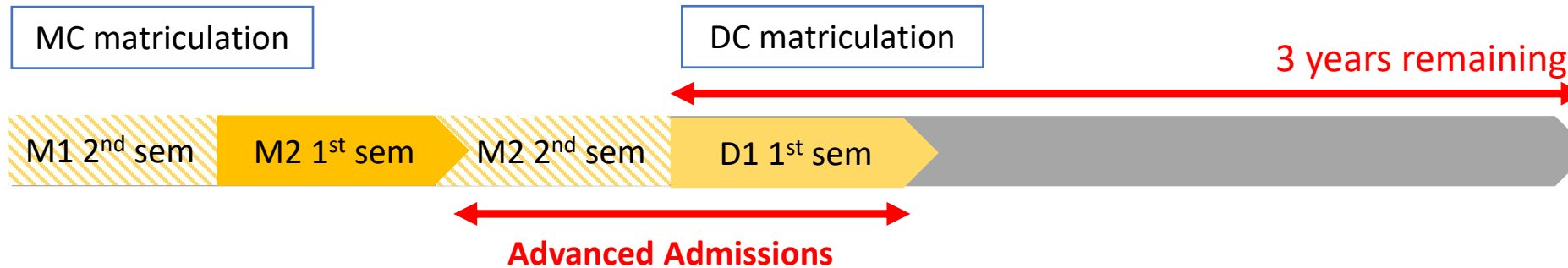
滞在先により月額支給額は異なります。ニューヨーク、ロサンゼルス、ロンドン、シンガポールなど物価の高い地域では最大15万円、物価の安いアジア諸国では10万円から支給されます。

# GP-RSS Admissions

## 出願資格について

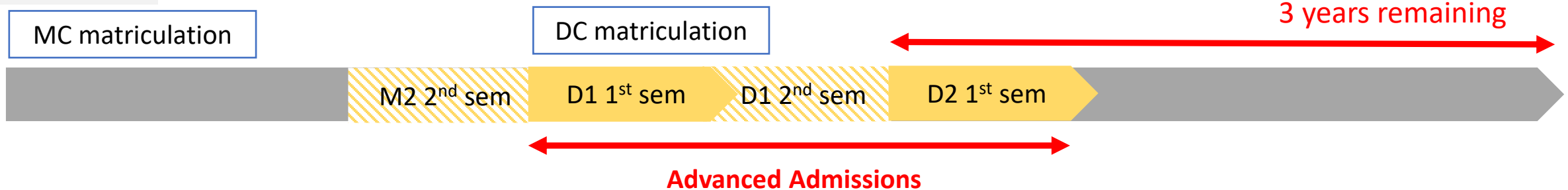
Due to the coursework requirements of our program, we only accept students who have a minimum of 3 years remaining in their Ph.D  
履修要件の関係上、博士課程の残り期間が少なくとも3年ある学生を受け入れます。

*Agriculture, Engineering, Environmental Studies, International Cultural Studies, International Research Institute in Disaster Science (IRIDeS)*



Students must enter GP-RSS no later than the 1<sup>st</sup> semester of D1. GP-RSSにはD1の前期（1学期）までに入学する必要があります。

### Medicine



Students must enter GP-RSS no later than the 1<sup>st</sup> semester of D2. GP-RSSにはD2の前期（1学期）までに入学する必要があります。

# GP-RSS Admissions

## Frequently Asked Questions

Q: Are selection criteria different for when students apply?

出願時期によって選考基準は異なりますか？

A: YES, since the program is designed for MC students who declare their Ph.D. early, advanced admissions students who wish to enroll with less remaining years in their Ph.D. to complete the program will be screened competitively, especially for their feasibility in international research collaboration (i.e. doctoral research residency).

本プログラムは、博士課程への進学を早期に決断する修士課程の学生を対象として設計されているため、博士課程の残り期間が比較的短い段階で出願を希望する進学後の学生については、より厳しい選考が行われます。特に、国際共同研究（例：博士研究滞在）の実行可能性が重視されます。



# GP-RSS Admissions

## Frequently Asked Questions

**Q: My Ph.D. project only involves domestic research topics.**

私の博士研究は国内の課題のみを対象としています

**A: GP-RSS students are required to have an international component to their research. Please discuss this point with your supervisor.**

GP-RSSでは研究に国際的な要素を含めることが求められます。指導教員と十分にご相談ください。

**Q: I am currently funded by another agency.**

現在、他の機関から研究資金を受けています

**A: The GP-RSS can offer partial funding through research assistantship to complement your current funding (maximum funding restrictions apply).**

**All MEXT scholarships and private funding are subject to complementary funding, however, student loans (such as JASSO) are not seen as competing funding (students are responsible for their own finances including taxation).**

GP-RSSでは現在の資金を補完する形で、RA雇用による部分的な財政支援を提供することが可能です（支援金には上限有）。すべての文部科学省（MEXT）奨学金および民間資金は、補完的資金支援の対象となりますが、日本学生支援機構（JASSO）などの学生ローンは競合する資金とは見なされません（税金を含めた経済的責任は学生本人にあります）。

# GP-RSS Admissions

## Frequently Asked Questions

**Q: I am an international student on a MEXT Scholarship, and thus required to stay in Japan for the duration of my funding – how does the research residency work?**

私はMEXT（文部科学省）奨学金を受けている外国人留学生で、資金提供期間中は日本に滞在することが求められています。博士海外研修はどのように実施されますか？

**A:** Students with a MEXT Scholarship may need to sign the MEXT monthly stipend form at the beginning of the first month of their six-month research residency, then return to Japan at the end of the next month to sign the stipend form again in order to continue receiving the scholarship. This process will be repeated until the completion of their research residency. Please keep in mind that the travel support is not provided by the GP-RSS.

Meanwhile, students may be supported by the MEXT Scholarship during the MC Program, while the GP-RSS offers the RISE Program upon entering the DC Program. The RISE Program offers travel support based on the duration and frequency of research activities: once within six months, twice within three months, three times within two months, or up to six times within one month. This travel support is fully funded by the GP-RSS.

# GP-RSS Admissions

## Frequently Asked Questions

**Q: What are some of the criteria that student selection will be based on?**

学生の選考は、どのような基準に基づいて行われますか？

**A: The GP-RSS is interested in selecting students with a high aptitude for international collaboration. We seek strong recommendation from your supervisor, a clear timeline of international collaboration (research residency), and a strong proposal based on research collaboration with universities abroad.**

**You MUST discuss your Ph.D. plans with your supervisor in advance, and that they are willing to support you in your research plans.**

**If you do not intend on continuing your Ph.D., we cannot consider you in our student selection.**

GP-RSSでは、国際共同研究に高い適性を持つ学生の選抜を重視しています。指導教員からの強い推薦、国際共同研究（博士海外研修）に関する明確な計画、海外の大学との共同研究に基づいた充実した研究提案が求められます。

出願前に必ず指導教員と博士課程の計画について相談し、研究計画に対して十分な支援が得られることを確認してください。

博士課程を継続する意思がない場合は、選考対象となりません



# GP-RSS

International Joint Graduate Program in Resilience and Safety Studies

For further information, please refer to the GP-RSS website at

<http://gp-rss.tohoku.ac.jp>

**LATE SUBMISSIONS WILL  
NOT BE CONSIDERED**

Admissions Deadline 出願締切 : (July 31, 2025 at 17:00)

Submit your complete applications to [\*\*gprss \[at\] grp.tohoku.ac.jp\*\*](mailto:gprss@grp.tohoku.ac.jp)

Interviews 面接期間 : August, 2025

Acceptance 合格通知 : September 17<sup>th</sup>, 2025 (学位プログラム一斉発表日)

Program Enrollment プログラム所属日 : October 1st, 2025