

Advanced Liberal Arts

Global Resource Management

Doshisha University

Questions and Answers by GRM graduates

Many students have participated in this program since AY2012.
Here are some testimonials from GRM graduates who are active all over the world.



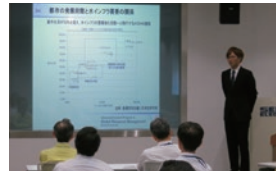
Q1 What is(are) the reason(s) you decided to participate in the GRM program?

A In addition to the excellent research support such as subsidies for overseas research, I was attracted to the fact that the program aims to contribute to the solution of social issues and is committed to "integration of humanities and sciences" beyond the boundaries of existing academic fields.

I wanted to broaden my horizons and knowledge beyond my specialty. In addition, I wanted to have more opportunities to interact with people from various backgrounds.

I was interested in the concept of "integration of humanities and science".

The GRM program was a perfect program for me to combine my background in science with the knowledge I acquired in humanities effectively.



Q2 What made you decide on your current career/job?

A NGOs/NPOs, as a group of experts independent of the government and corporations, have a role to play in leading citizens' participation in politics through policy proposals and information dissemination. I think that is why we are required to be creative and take on challenges by changing our approach in various ways, and it is also interesting to have a variety of experiences.

I thought I was able to continue researching themes of interest to me.

In my job environment, we have bi-weekly seminars where researchers from various disciplines give lectures about the recent developments in their field of study and we actively engage in multi-disciplinary discussions. This is what I have learned from the GRM program and continued in my current job.

Q3 In what kind of situations did you find it positive and helpful to have learned from GRM program as you work for the current company?

A Through the GRM program, I have acquired the attitude to face issues from a perspective beyond the boundaries of the humanities and sciences and academic disciplines, and to learn new fields of specialization when necessary. As a result, I feel that I am able to face the social issues that need to be solved, rather than being confined to the scope of my own specialty.

I was able to learn about the SDGs and other issues that are being addressed on a global scale from early on.

When I face with difficulties, I became able to consider things from multiple angles.

I engaged in several projects concerning Sustainable Development in developing countries and had various field trips to different parts of the world. This has helped me to enhance my task management and communication skills in my current projects.



Questions and Answers by GRM graduates



Q4 What is your perspective on the expanding role of a Ph.D. holder in society in the days ahead?

A Ph.D. holders are able to gain deep knowledge and wisdom through their interest and research in their own specialized fields. However, they often have a narrow perspective, so I believe that by looking at things different from your own specialty, you can make new discoveries and become a more sought-after person in society.

We expect to be able to develop technologies and provide welfare support based on an understanding of the needs of the community and individuals as well as a whole society.

I believe that the most important value needed to achieve sustainable development on our planet is to enhance critical thinking! Getting Ph.D. is the best training to develop such an ability.

Q5 Please write a message to students who are considering whether or not to take the GRM Program.

A Entering a doctoral program itself is a decision that requires a great deal of determination, but the experience of pursuing your interests and questions and gaining expertise will be an advantage that you can use in a variety of situations afterwards. If you think the GRM program can help you do that, then take advantage of it.

If you are not sure about participating in GRM, I would recommend you to do so because you will gain a lot of experiences that are difficult to gain in a typical student life. There are many things that you can't understand until you actually try them, so I always try to do things when I am in doubt.

Your hesitation is evidence that you want to participate in the GRM program.

If you are looking for a highly engaging and multi-disciplinary research environment, I strongly suggest the GRM program! Even though it is challenging to put additional effort into earning extra credits and classes, what you gain will change your way of thinking for the rest of your life!



Respondents



Completed in AY2019
Affiliation: Graduate School of Global Studies

MORIYAMA Takuya

Name of the company / institution

Kiko Network (Environmental NGO)



Completed in AY2019
Affiliation: Graduate School of Science & Engineering,
Mechanical Engineering

MUKAYAMA Tomoyuki

Name of the company / institution

ISUZU ADVANCED ENGINEERING CENTER, LTD



Completed in AY2020
Affiliation: Graduate School of Global Studies

KHALILI Mostafa

Name of the company / institution

The Hakubi Center for Advance Research, Kyoto University



Completed in AY2021
Affiliation: Graduate School of Science & Engineering,
Applied Chemistry

ZHANG Wenyu

Name of the company / institution

Materials Analysis Technology Inc. (MA-tek)



Completed in AY2021
Affiliation: Graduate School of Social Studies,
Social Welfare

YANG Huimin

Name of the company / institution

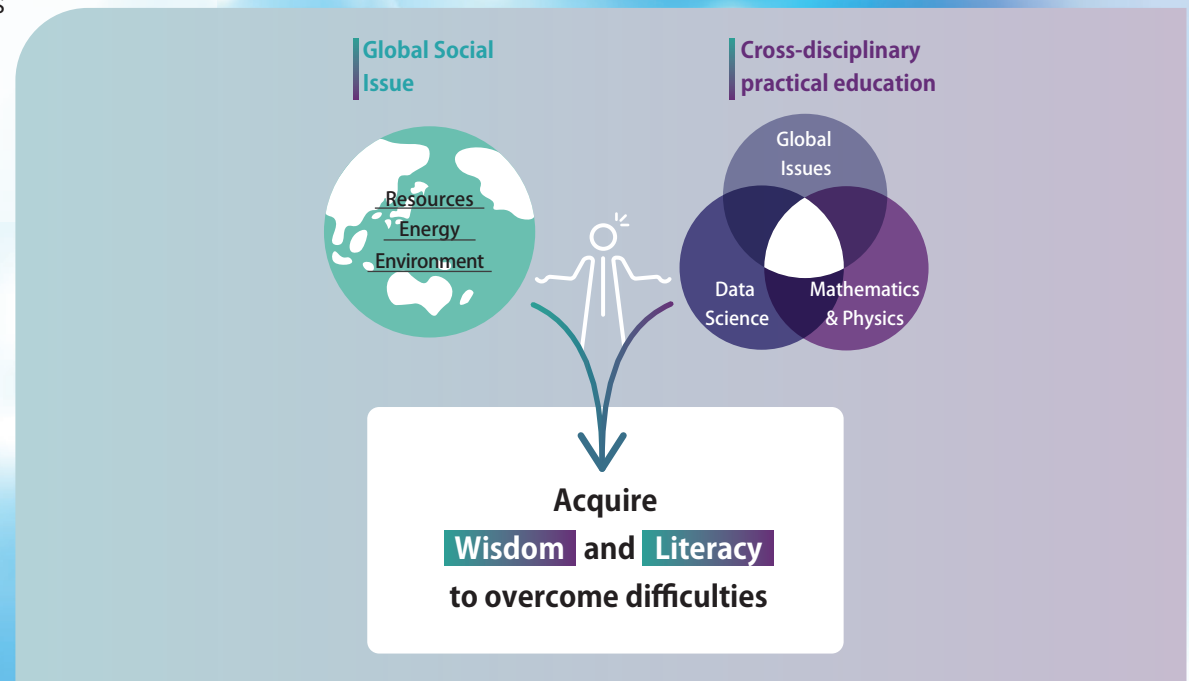
Public university

Acquire wisdom and advanced literacy to overcome difficulties in the society

The main feature of this program is that graduate students from various backgrounds and nationalities are studying together in English through interdisciplinary education. Literacy here is not simply the ability to read and write. It refers to the ability to interpret issues and make independent judgments by using learned knowledge and information.

Developing Human Resources

The GRM program nurtures "Con Engineers and Innovators": who not only have the skills to apply science and make it useful in human life, but also have "Wisdom" that combines science and technology, as well as "Conscience" to support people.



GRM Program Features: What is expected of the students?

-To be a person who can overcome difficulties together with diverse others-

1 Acquire "Wisdom" and "Literacy" to overcome difficulties

We live in an uncertain, complex, and ambiguous society today, where the future is even more difficult to predict. In the GRM program, students acquire the "Wisdom" to overcome challenging situations through application of science and practical human skills, as well as "Literacy" to tackle difficulties with other people.



3 Study in English with students of different backgrounds

In the GRM program, students of various nationalities study together. Although classes and student presentations are conducted in English, many students who are not fluent in English take the courses. Communication across languages and cultures might be difficult at first, but students improve their skills by challenging themselves repeatedly.



2 Learn on the field and learn from the field

Since the establishment of the program in 2012, the GRM program has consistently emphasized field visits and exposure to local realities. Students experience the difficulties of the real world in the field and find their current abilities. From this experience, they will think deeply about what they should learn in the program and what abilities they should acquire in the future. The students learn both in the field and in the classroom. This has been the principle of the GRM program.



4 Leads to post-graduate career development

Students will acquire fundamental skills as graduate students from a different perspective than the expertise they acquire at their graduate school. The knowledge and multifaceted viewpoints acquired in the GRM program will be very useful for your career development after completing the graduate school.



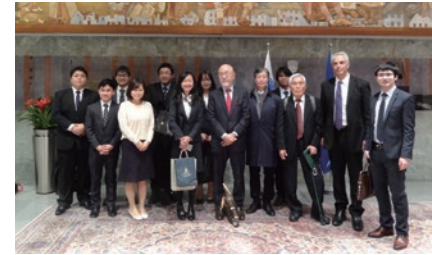
Program Overview

About GRM Program

GRM program is a graduate education program for all graduate students in the master's and doctoral degree programs.

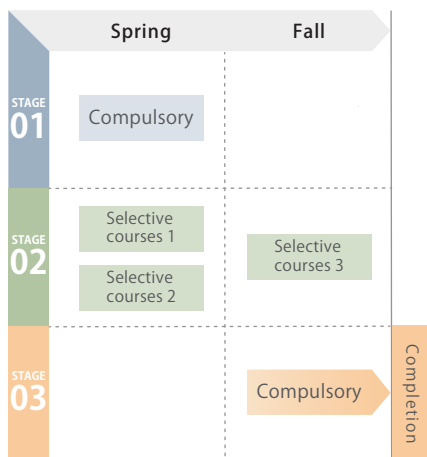
Students will take the GRM program besides the educational program of their graduate schools, and earn the credits necessary for completing GRM program (at least 10 credits in five courses). Students who have been certified to have completed of the program after earning the required credits will receive a certificate of completion from the president of the university.

In the GRM program, there is no upper limit to the number of courses you can register in. Therefore, it is possible to complete the program by earning 10 credits in 5 courses in one year. Alternatively, students can take courses over multiple years to complete the program.



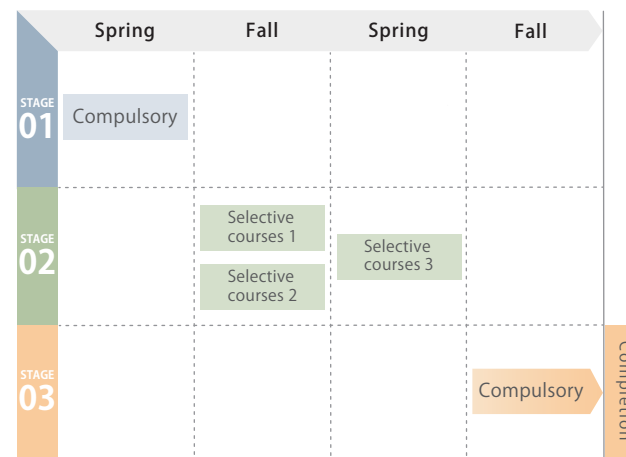
Model case 01

To complete in a year



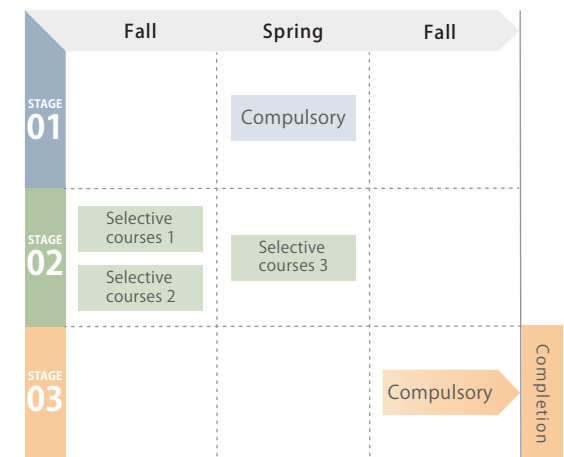
Model case 02

To complete in two years



Model case 03

To start from fall semester



Topics

Topic 1 Support for Building Career Paths

Expand your vision with the wisdom

The GRM program has produced more than 30 graduates with doctoral degrees. One of the unique features of this program is that about half of these graduates have chosen non-academic fields as their first career, mainly research positions in the private and corporate sectors. The other half have gone on to academic fields such as research positions at universities and public research institutions.

Many GRM students receive relevant and multifaceted expertise that would be difficult to obtain on their own through coursework, regular meetings with career coordinators, and guidance on career development. As a result, they are able to think more deeply about their post-graduate and post-doctoral career development from an early stage and act with a high sense of purpose to create the career they desire.

Career paths of GRM graduates

Industry

Engineers/Managers with management skills to prevent conflicts caused by cultural friction in companies with global operations. People who can propose innovative strategies

Government

Public servants and government agency employees who can lead relief, development, conflict resolution, and peace-building efforts, unique to Japan as global leaders

Education

Innovative researchers possessing the ability to provide realistic analyses of modern global issues and who can expand existing disciplines into new frontiers

Career paths of 35 GRM graduates at the end of AY2023

Non-academic	Academic	Others *Graduate school at overseas, etc.
14	17	4

Employment results

- Electrical equipment manufacturers
- Measurement and analysis equipment manufacturers
- Multinational air conditioning manufacturers
- Property development company
- Resource development company
- Medical consultant
- National research agency
- Independent administrative institution
- Researcher at a national university
- Full-time faculty at a public university
- Full-time faculty at a private university
- Researcher at a foreign university

Topic 2 GRM Common Rooms

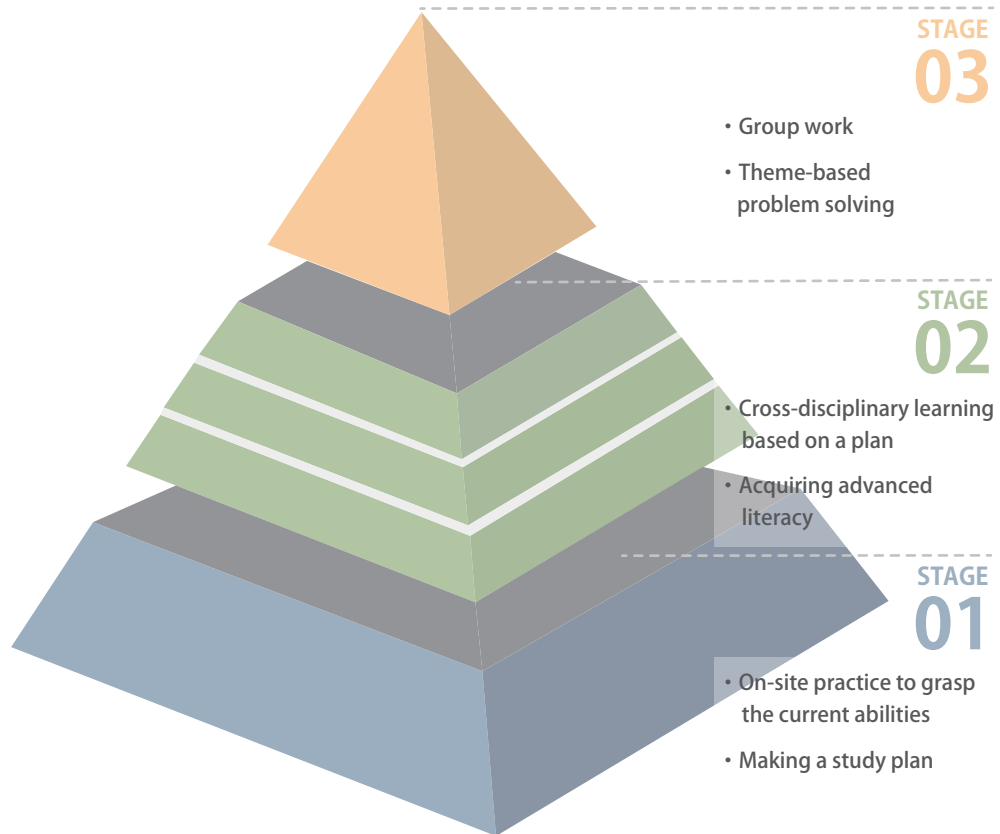
GRM Common Rooms, one located on the second floor of Shikokan building at Karasuma Campus and another one on the first floor of Hochikan building at Kyotanabe Campus, are open to the GRM students to improve students' learning environment.

The two common rooms are connected online to enable students to remotely take lectures offered at the other campus.



The curriculum of GRM

The curriculum consists of three stages, and the GRM program is based on the principle of "designing your own study plan". The first stage (taken at the beginning of the course) and the third stage (taken at the end) are required courses, but students can choose the other courses they like and earn the credits necessary to complete the program (at least 10 credits in five courses). Students can further develop their own strengths and abilities or deepen their studies in their weak areas. As a result, the knowledge and experience accumulated by each student will be unique.



Compulsory

○ On-site Group Work

This program provides on-site practice (either overseas or in Japan) to experience "local conditions and issues" on chosen topics. Through learning in the field, students will recognize knowledge to be acquired, abilities to be developed, and necessary perspectives, and design their own learning plans for the future.

The curriculum of GRM

STAGE 02

Selective (3 courses or more)

- Resource Management for Coexistence and Cultural Diversity
- Mathematics and Physics as Liberal Arts
- Infrastructure Design for Human Communities
- Environmental Earth Science as Liberal Arts
- Global Resource Management: Interdisciplinary Approach 1 -Natural Science
- Global Resource Management: Interdisciplinary Approach 2 -Humanity and Social Science
- Global Resource Management and Sustainable Development Goals 1
- Global Resource Management and Sustainable Development Goals 2
- Global Resource Management and International Relations
- Research Methods of Social Sciences
- Global Society in the Modern World
- GRM Topics 1 -Natural Hazards and Disaster Management
- GRM Topics 2 -Topics in Mathematics for Information and Data Sciences
- Capacity Development for Coexistence and Cooperative Works
- Introductory Laboratory of Infrastructures

STAGE 03

Compulsory

- Seminar for Advanced Liberal Arts

Students work in groups to develop practical suggestions for problem solving. Along the way, students will also see their performance growth as a result of taking the GRM program. Group collaboration is required as well as an interdisciplinary approach.



GRM Program Course List

Selective / Compulsory	Course Name	Credit	Semester	Campus	Intensive
Compulsory	On-site Group Work	2	Spring	T(I)	●
Selective (3 courses required)	Resource Management for Coexistence and Cultural Diversity	2	Spring	Online	
	Mathematics and Physics as Liberal Arts	2	Spring	Online	
	Infrastructure Design for Human Communities	2	Fall	Online	
	Environmental Earth Science as Liberal Arts	2	Fall	I	●
	Global Resource Management: Interdisciplinary Approach 1 -Natural Science	2	Spring	T	
	Global Resource Management: Interdisciplinary Approach 2 -Humanity and Social Science	2	Spring	I	
	Global Resource Management and Sustainable Development Goals 1	2	Fall	T	
	Global Resource Management and Sustainable Development Goals 2	2	Fall	I	
	Global Resource Management and International Relations	2	Spring	I	
	Research Methods of Social Sciences	2	Fall	I	
	Global Society in the Modern World	2	Fall	I	●
	GRM Topics 1 -Natural Hazards and Disaster Management	2	Spring	I	●
	GRM Topics 2 -Topics in Mathematics for Information and Data Sciences	2	Spring	I	●
	Capacity Development for Coexistence and Cooperative Works	2	Spring•Fall	I•T	
Introductory Laboratory of Infrastructures	2	Spring	I		
Compulsory	Seminar for Advanced Liberal Arts	2	Fall	I	●

•All courses can be registered from M1.

•In consideration of the language ability of the students, GRM classes will be conducted primarily in English.

•Face-to-face classes will be held on either campus (I = Imadegawa/T = Kyotanabe). (I) or (T) means that you can attend the class on the campus via Zoom.

•In order to register and take "Seminar for Advanced Liberal Arts", "On-site Group Work" must have been completed or registered during the same year.

MESSAGE

This course is derived from "Global Resource Management" which was adopted in the Leading Program for Doctoral Education (Leading Graduate School), under the category of interdisciplinary programs for a harmonious multicultural society in 2012.

The GRM program is a comprehensive doctoral program providing advanced education in the interdisciplinary field of global resource management through the integration of global studies and infrastructure science/resource and energy science. Based on its philosophy and outcomes of the program over the past 10 years, the program has been reorganized as the new "Global Resource Management Program," which constitutes the "Advanced Liberal Arts Course," a common graduate school education program starting in 2023.

To be widely active in society, it is necessary for graduate students to have literacy in a broad sense. This does not refer to the ability to read and write, but rather to have "the wisdom to be able to respond to unknown problems, difficulties, and crises by utilizing a variety of information based on acquired knowledge". Of course, there is no doubt that the expertise acquired through graduate school is important and fundamental. Nevertheless, it is also true that society is changing to the extent that expertise alone is no longer sufficient. This program emphasizes learning from perspectives beyond one's

expertise. Besides acquiring basic knowledge outside of one's own field through classroom lectures, the program also values learning processes and exercises by visiting sites that are facing global issues such as disasters and natural resource shortages. The GRM students will grow from the experience of overcoming difficulties through co-learning with other students, and from the new insights and stimulation they gain from working together. This is the universal ability, or the literacy, needed to solve increasingly complex real-world problems.

This program, together with the "Next Environment" Collaborative Creation Course and the Comm 5.0 AI and Data Science Program, constitutes the "Advanced Liberal Arts Courses," a common graduate education program. The goal of the GRM Program is to produce human resources who can contribute to diverse fields of society, both in academia and non-academia, by equipping them with a broad range of literacy as graduate students and researchers.

GRM Program Coordinator
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