Advanced Doctoral Program in Global Resource Management

Program Guide

<For Students enrolled in and after AY 2019>

Published: March 2021

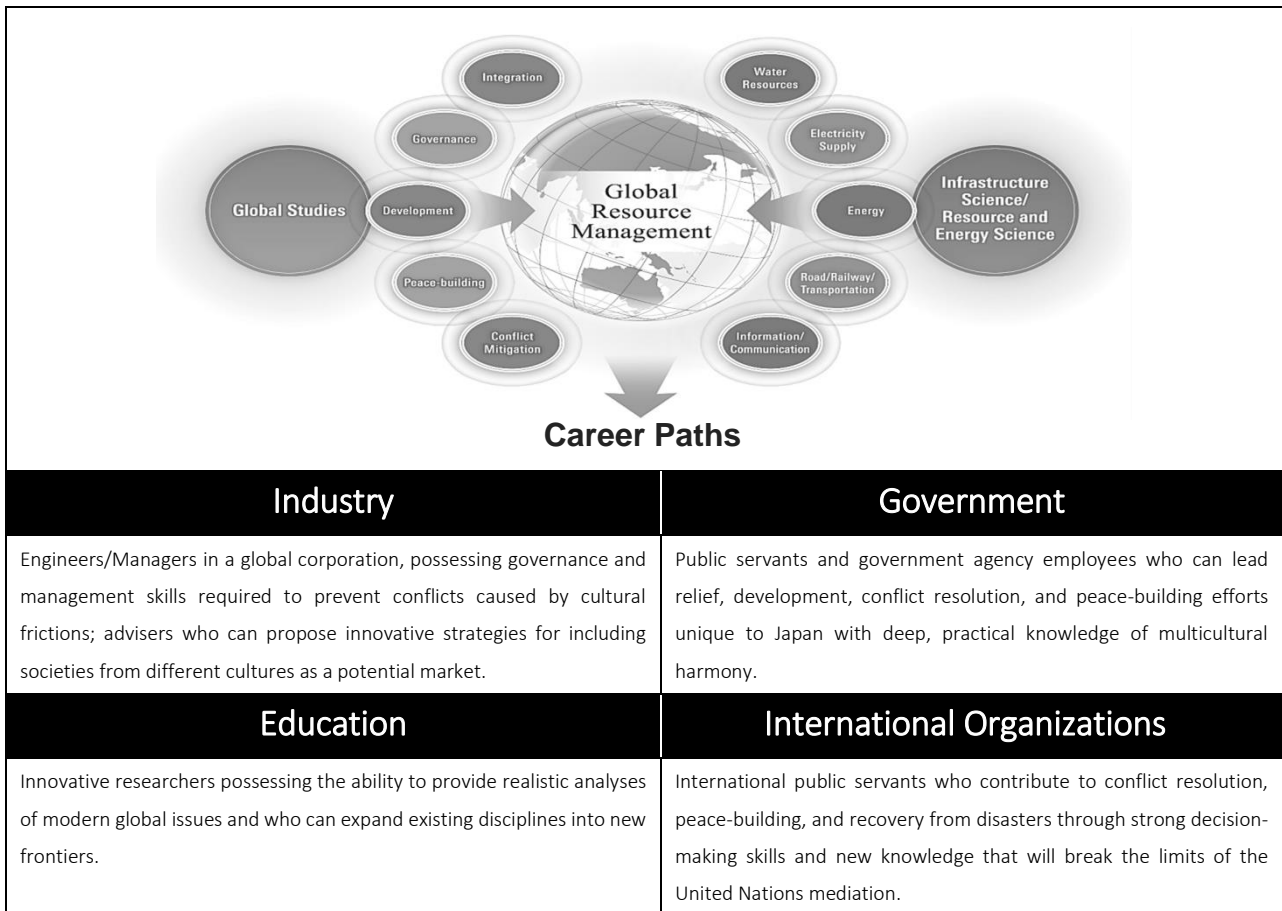# Academic Year 2021

Doshisha University

CONTENTS

I. The Ideal Leaders Fostered by the GRM Program

Advanced Doctoral Program in Global Resource Management, Doshisha University (hereinafter referred to as "GRM Program") was established under the philosophy of principled education, also aims at creating a new interdisciplinary graduate program and expanding its success in globalizing or internationalizing its educational programs. Instead of producing elitist leaders, this program will foster global leaders who will act in the developing or emerging countries, effectively utilizing the knowledge gained in social sciences, humanities, and engineering and sciences. We are proud that this is a program owned by and unique to Doshisha University, and is firmly based on the educational principles of the founder of Doshisha University, Joseph Hardy Neesima.

Target academic fields of GRM Program represent novel interdisciplinary fields that serve the management of global resources, such as "natural resources and energy engineering," "infrastructure and sciences" (that constitute the foundation for human survival) and "humanities and social sciences" (that serve solutions to global-scale issues in modern society), and the ultimate goal of GRM Program is to realize an integrated multicultural society.

The idea of Global Resource Management can be translated as an effort to seek an appropriate and fair management and use of natural resources, human resources and social capital, and thereby to build a reliable and better social infrastructure that serves the sustainable development of society and people's peace and security.

Based on such idea, GRM Program aims to cultivate leaders the ability to solve difficult problems of modern society, break through impasses through the effective use of practical diverse knowledge from humanities and science fields, and identify optimum solutions to technical issues in the natural scientific field from not only scientific viewpoints but also from humanities and social sciences viewpoints with the perception of "distribution of resource".

Career Paths

Industry	Government
Engineers/Managers in a global corporation, possessing governance and management skills required to prevent conflicts caused by cultural frictions; advisers who can propose innovative strategies for including societies from different cultures as a potential market.	Public servants and government agency employees who can lead relief, development, conflict resolution, and peace-building efforts unique to Japan with deep, practical knowledge of multicultural harmony.
Education	**International Organizations**
Innovative researchers possessing the ability to provide realistic analyses of modern global issues and who can expand existing disciplines into new frontiers.	International public servants who contribute to conflict resolution, peace-building, and recovery from disasters through strong decision-making skills and new knowledge that will break the limits of the United Nations mediation.

- Admission Policy

GRM Program aims to develop global leaders with the ability to create an integrated multicultural society and welcomes students who:

① Aspire to resolve issues by working and learning alongside people facing life-threatening situations, such as disaster, conflict, and poverty.

② Possess critical thinking skills and a good command of English and any other language necessary for research, and strives to contribute to society with an ethical view of science and technology.

③ Aim to contribute to religious and ethnic harmony through an understanding of fairness based on an integrated knowledge of both the sciences and humanities, to control the emergence of any new problems faced on a global scale, and to provide assistance for recovery and development from existing struggles.

④ Desire to promote sustainable development and wealth disparity reduction in newly developing countries that have overcome their struggles, and to form strategic partnerships with these countries.

II. Enrollment in the GRM Program

1. Eligibility to take the GRM Program

The GRM Program is open to all students of Graduate Schools and Five-Year Doctoral Programs except the students of the Professional Graduate Schools (Law School and Business School).

There is no admission test and all students who meet the requirements are eligible for the GRM Program.
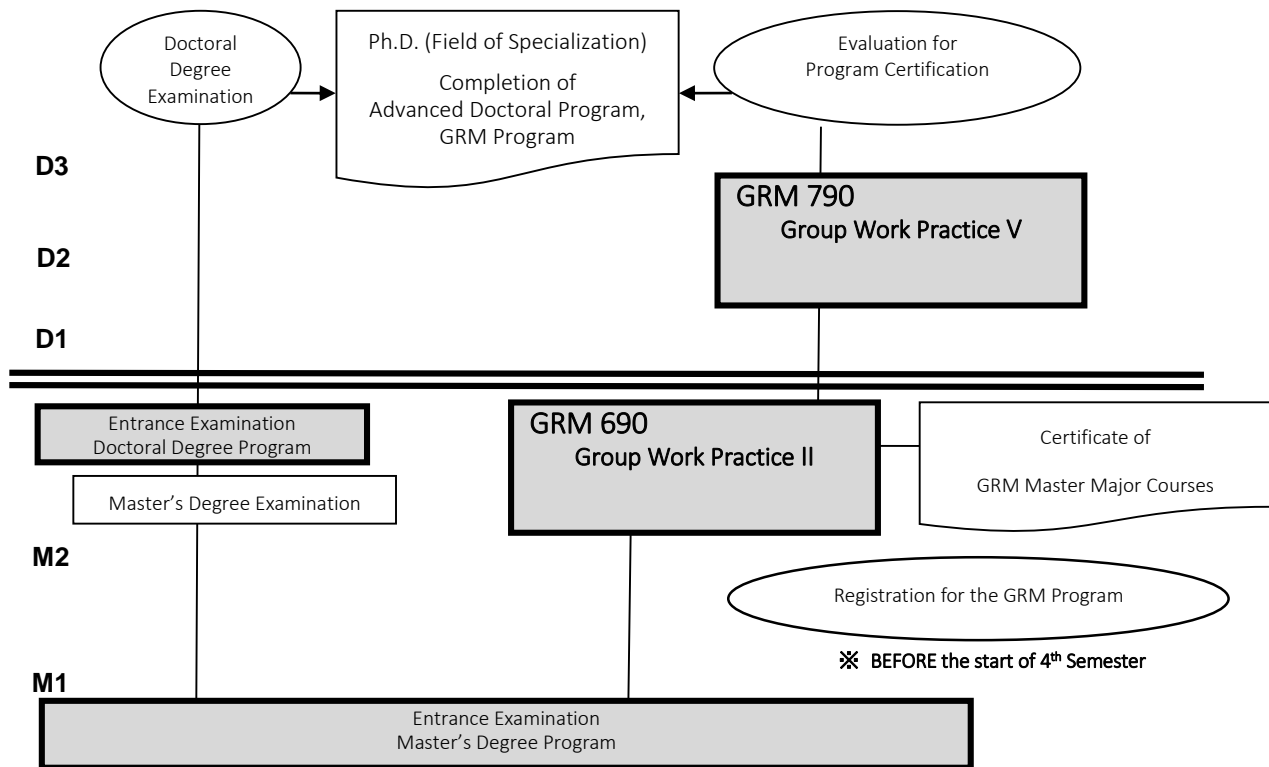
The GRM Program can be taken additionally with the students' affiliating Graduate School. Students have no obligation to continue to a doctoral program. Enrollment only during the Master Program or declination during the program is possible.

The GRM Program is also open for students that are not aiming to complete their Doctoral Degree or the GRM Program, and it is possible for students to register only courses that interest them.

Students must check their affiliating Graduate School Office whether they are eligible to be enrolled in the GRM Program.

2. Steps towards the completion of the GRM Program

The following chart shows the relationship between the course of study of the graduate school and GRM Program.

There are 2 choices of enrolling in the GRM Program.

① Completing the Doctoral Degree Program and the GRM Program. (GRM Student)

② **NOT** completing the GRM Program.

The choice of either of the above can be decided at the time of course enrollment, and switching from the either can be made with the submission of a designated form within the announced submission period before the start of the 4th Semester of the Master Program.

e.g.) Students are required to submit a designated form if they wish to switch from "② NOT completing the GRM Program" to "①Completing the Doctoral Degree and the GRM Program. (GRM Student)"

As noted previously, students affiliated to the eligible Graduate School and students who wish to enroll in the GRM Program should take the courses of the Master Program based on the Graduate School Program Guide and etc. and take the GRM Program courses in a structured/stepwise manner. In the second year of the Master Program, there will be an Intermediate Evaluation to determine the continuance of the GRM Program.

At the Intermediate Evaluation, the student will be checked whether the student has completed the required Credits (8 credits), and completed the course number 690: Group Work Practice II with the required grading. After passing the Intermediate Evaluation, if the student withdraw the GRM Program (e.g. not continuing to the Doctoral Program and etc.) the Certificate of GRM Master Major Courses will be issued.

The Evaluation for Program Certification of the GRM Program will be held for students who will take the Doctoral Degree Examination, obtained the required GRM credits (20 credits) including the course number 790: Group Work Practice V with the required grading. When students have passed the Evaluation for Program

Certification of the GRM Program, and the Doctoral Degree Examination, Their completion of the Doshisha University Advanced Doctoral Program in your diploma will be added in their diploma.

Doctorate No:

Doshisha University

Hereby Confers Upon

Date of Birth:
the Degree of
Doctor of Philosophy in

in Recognition of the Fulfillment of the Requirements
for the Doctoral Degree Program
in   Course
of the Department of
within the Graduate School of

PRESIDENT,   , Dr.
DOSHISHA UNIVERSITY

also completed the Advanced Doctoral Program in Global Resource Management (for Leading Graduate Schools)
Date   ,

This is an authorized translation of the original Japanese-language diploma.

III. Features of the GRM Program

1. Program Contents and policy on implementation

The GRM program provides a new research field, "Global Resource Management" which is unified with the infrastructure of physical, social, and spiritual dimensions. The GRM Program focuses on "Global Resource Management (GRM)" and cultivates students to be able to have a higher perspective of their research filed with an original and academic angle with this new research field as an add-on education program.

Group work/onsite practice with the versatile theme related to "Infrastructure science/resource" will be conducted to function as a node to connect all Graduate School students studying multidisciplinary collaboration, cooperation, problem-based thinking, and to cultivate all-around leaders with a high level of expertise of a flexible and applied skill.

The Courses offered by the GRM program are mainly conducted in English considering language skills of the GRM students.

Knowledge / Skill

The GRM Program provides courses which enables students to have a cross border perspective and mind with a foundation of understanding diversity and high applicability, and cultivates the ability for self-directed expansion of knowledge and skill.

Provides courses as an interdisciplinary coeducation field, and learn how to distribute common resource of human society, and acquire how to discover the solutions by learning together.

Cogitation / Judgement / Expressiveness

Humanities and Social Sciences and Science and Engineering students will study/discuss together to solve composite tasks through practical exercises to gain different aspects of knowledge and ideas.

By students of different study areas studying together with the provided courses, the students will strengthen multilateral cogitation, judgment with higher perspective, expressiveness to have mutual understanding with one another, persuasiveness, and adjusting power which is required as a universal strength for all Graduate School students.

Independence / Diversity / Cooperativeness

The program will provide courses with Issue focused and Solution oriented education methods to acquire the attitude for independent problem solving.

Using group work effectively to solve composite problems, the program will provide collaborative work with multilateral perspectives to learn cooperativeness.

1	The program will foster leaders who can tackle issues in emerging or developing countries by working alongside with people.

The ideal leaders developed by the program will work alongside the local people and communities to gain a full appreciation and understanding of their culture and context and help them find solutions to their struggles. Through their experiences and practical knowledge, eventually, these leaders will contribute to the development of Japan and the world.

2	Problem solving with the theme of "Resource".

The problems arising in modern society is mainly caused by inequalities in access to infrastructures and/or in the distribution and ownership of resources. The program will assist in addressing these issues and strive to realize a harmonious co-existence of multiple cultures by providing solutions founded on sustainable development, human security and a fair and reliable distribution of resources. The program emphasizes on the co-existence with difference in religion as one of the major strategies towards realizing a harmonious multicultural society.
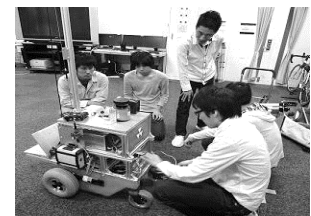

Global Resource Management

| Limits of Welfare States | Unpredictable Catastrophes | Limits of Modern Industrial Structure | Urgent Issue : to pursue the possibilities for multicultural co-existence in the contemporary world where one cannot rely on the framework of nation-state |
| Wars and Disasters | Ethnic and Religious Conflicts | Poverty and Income Disparities | |

To solve the various problems in modern society, redistribution and development of resource/energy/infrastructure is required.

Our mission is to foster "Global Leaders" who will be able to propose and work towards solution on issues related to multicultural co-existence

3	Students of the program will acquire knowledge integrating Science and Engineering and Global Studies, and apply them in the real world.

GRM is a doctoral program formed by integrating two of the university's well-established educational systems. They are the natural sciences and engineering sciences, specifically infrastructure science/resource and energy science, Global Studies and the educational system of humanities and social sciences related to multicultural co-existence. In order to bring about positive breakthroughs to the modern world where economic growth is stifled, the program will strive to create a new kind of infrastructure that unifies the physical, social, and spiritual dimensions.

～The Importance of a Comprehensive Integration of Science, Engineering and Global Studies ～
Building Development Managers who can Design, Operate and Maintain Infrastructures, and Cultivating Engineers who can Advocate and Implement Policies

The aim of Global Resource Management Program is not to produce highly specialized researchers, but Ph.D. who can pull together knowledge from various disciplines to advocate and promote sustainable development and multicultural harmony.
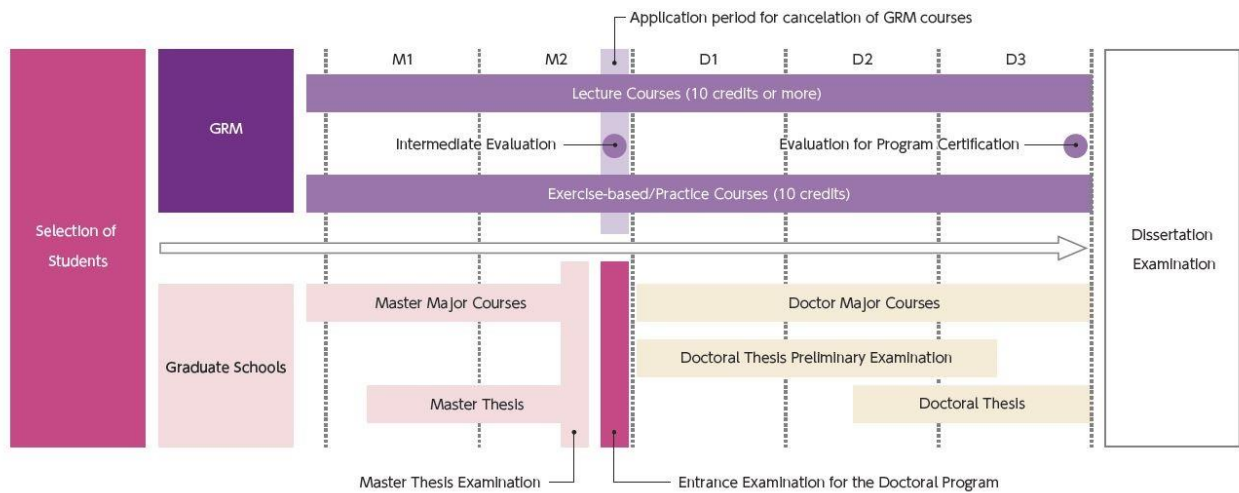
In developing and emerging countries, the capacity of graduates from single discipline, like humanities or social sciences, to take part in nation-building, are relatively limited. The same is true for science and engineering graduates. Even a business corporation that has succeeded in expanding globally through its science and engineering expertise cannot promote multicultural harmony without appropriate strategies and management practices and consideration for social responsibility. Similarly, an expert in humanities and social sciences will not be able to contribute effectively and holistically to society without any knowledge of infrastructure science/resource and energy science which form the core of the human society.

As the expectancy towards "Ph. D. holders "from society is high, knowledge of either Humanity and Social Science or Science and Engineering will limit their career path. Knowledge of Science and Engineering without the support of management skills or consciousness towards social contribution, one cannot be a leader to realize multicultural harmony even at a global company. On another hand, even with a deep knowledge of Humanity and Social Science, without the insight of infrastructure science/resource and energy science which is the foundation of the real human society, one cannot contribute to stabilization of human society.

Global Resource Management Program is a comprehensive doctoral program that provides interdisciplinary education, integrating science and engineering and global studies, emphasizing the values of equity, inclusiveness, integrity and accountability in the management of global resources. Participants of the program will gain strong support and incentives in promoting integrated multicultural societies around the world.

IV. Overview of the GRM Program

1. Curriculum of the Program

The GRM Program is a Five-Year Doctoral Program integrating the study fields of Humanities and Social Sciences and Science and Engineering as an additional program for students studying to achieve their diploma of their affiliating Graduate School/Major.

With the study expertise of their affiliating Graduate School/Major, students will take the Lecture Courses (10 credits of more) and the Exercise-based/Practice Courses (10 credits) in a scheduled manner within the five years of the Master and Doctoral Program.

There may be academic counseling before the course registration of the GRM Program.

Lecture Courses are provided with courses for Humanities and Social Sciences students and courses for Science and Engineering students. In the GRM Program, "Humanities and Social Sciences" and "Science and Engineering" are defined as below.

Humanities and Social Sciences students: Students in the Graduate School of Theology / Letters / Social Studies / Law / Economics / Commerce / Policy and Management / Global Studies.

Science and Engineering students: Students in the Graduate School of Science and Engineering / Life and Medical Sciences / Brain Science.

※ Students in the Graduate School of Culture and Information Science / Psychology / Health and Sports Science will have an academic counseling session to decide which courses (Humanities and Social Sciences or Science and Engineering) they should take.

2. GRM Lecture Courses

In the GRM Lecture Courses of the GRM Program, through the theme of "Resource Management" students will learn multilateral cogitation and different problem solving methods from their main research fields to acquire wide perspectives and way of thinking.

Course Number	Course Name	Course Overview
GRM601	Resource Management for Coexistence and Cultural Diversity（NO prerequisite）	The first Lecture Course to be enrolled in the GRM Program. Solving problems with effective development and administration of "resource" to realize a society with a harmonious co-existence of multiple cultures. The idea regarding "resource" will be marked, and the problems occurred will be explained in the course.
GRM602	Capacity Development for Coexistence and Cooperative Works（NO prerequisite）	Through dialogue, debate and self-expression, fundamental skill for cooperative works will be acquired with this course. This course includes self-evaluation for the students to understand oneself, and to understand the versatile skills/attitude/required in society.
GRM701	Physics in daily life（＊prerequisite GRM601）	This is the fundamental course to integrate Humanities and Science. With the fundamental knowledge, Science students will learn "Humanities like" perspectives and ways of thinking, and Humanities students will learn the "Science like" perspectives and ways of thinking. All students will choose from either of the subjects.
GRM702	Introduction to Social Science and Humanity（＊prerequisite GRM601）	
GRM730	Introductory Infrastructure Engineering（＊prerequisite GRM701）	These are the courses for students of Humanities. Fundamental methods in the Science field will be learned, and ways of thinking or approaches for problem solving in a different field will be acquired.
GRM731	Introductory Earth and Environment Science（＊prerequisite GRM701）	
GRM732	Introductory Laboratory of Infrastructures（＊prerequisite GRM701）	
GRM733	Introductory Qualitative Research Methods（＊prerequisite GRM702）	These are the courses for students of Science. Fundamental methods in the Humanities field will be learned, and ways of thinking or approaches for problem solving in a different field will be acquired.
GRM734	Introductory Quantitative Research Methods（＊prerequisite GRM702）	
GRM735	Introductory Global Studies（＊prerequisite GRM702）	

＊Prerequisite: a course that must be completed prior to being allowed to start on the next course

3. GRM Exercise-based/Practice Courses

Problems are increasing with complexity and difficulty, and several personnel with different expertise to solve the problem is necessary. The GRM Program will provide several group work practices to train the capability to make the required decision by oneself with the cooperative skill to work with one another.

Course Number	Course Name	Couse Overview
GRM650	Group Work Practice I (Multi-perspective approach on complex problems) (No prerequisite)	The first Exercise-based/Practice Course to be enrolled in the GRM Program. Through group work practices, students will understand the ways to approach complex problems with practical examples. There are many ways to approach one problem, and this course emphasis on the importance of On-site observations to understand the field site.
GRM690	Group Work Practice II (Basic procedures of research projects) (No prerequisite)	This course is to be enrolled in the last semester of the Master Program. With group work practice, students will learn the steps from project planning, collecting information, agenda making, and building solutions. This course acts as the checkpoint for the Intermediate Evaluation of the GRM Program.
GRM750	Group Work Practice III (A solution for real world) (＊prerequisite GRM690)	The first Exercise-based/Practice Course to be enrolled in the Doctoral Program. As planning feasible solutions is emphasized in this course, on-site observations with group work and agenda making based on the site will be implemented in this course.
GRM751	Group Work Practice IV (Project design & proposal writing) (＊prerequisite GRM750)	In this course, project planning and management, and technical aspects will be learned, and an actual project plan will be made with group work. The project plan that has passed the evaluation will be provided with funding to realize the plan.
GRM790	Group Work Practice V (Autonomous management & a complete solution) (＊prerequisite GRM751)	This is the final Exercise-based/Practice Course. With the independent and proactive action, the students will present a feasible solution. This course also is the Evaluation for Program Certification of the GRM Program.

＊Prerequisite: a course that must be completed prior to being allowed to start on the next course

4. Course registration models

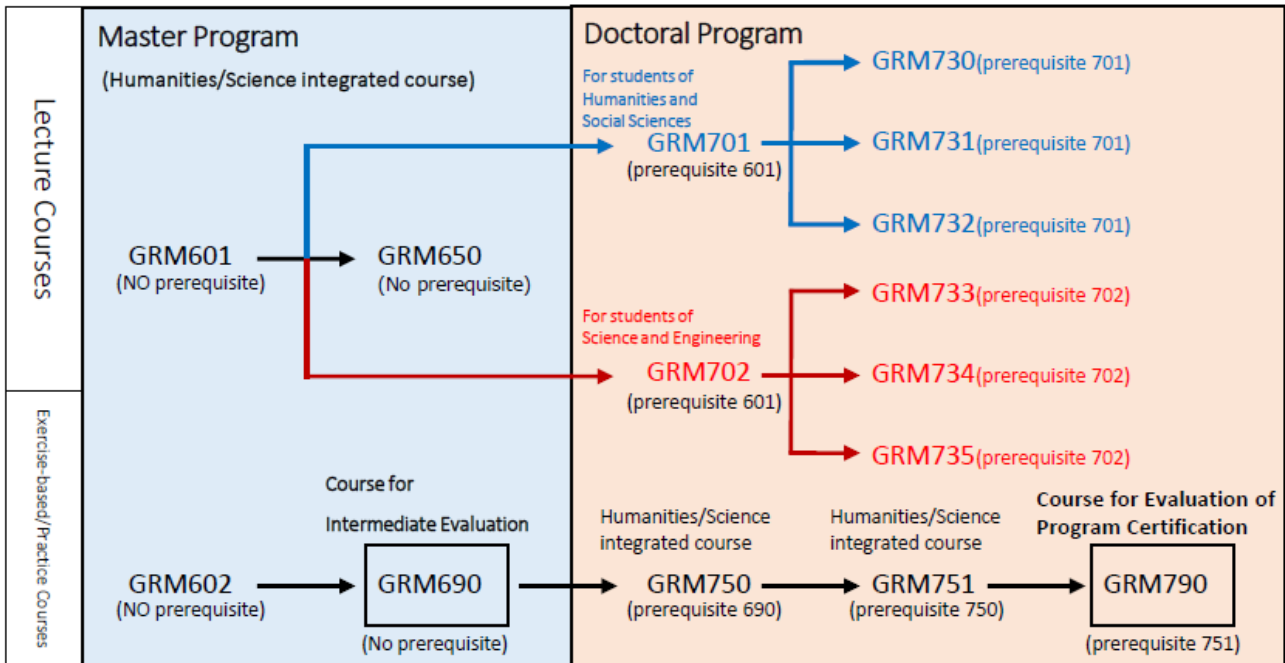The semester of the courses may change each academic year.

※ Students in the Graduate School of Culture and Information Science / Psychology / Health and Sports Science will have an academic counseling session to decide which courses (Humanities and Social Sciences or Science and Engineering) they should take.

① Humanities and Social Sciences students

	SPRING SEMESTER	FALL SEMESTER
M 1	GRM601 Resource Management for Coexistence and Cultural Diversity	GRM602 Capacity Development for Coexistence and Cooperative Works
M 2	GRM650 Group Work Practice I	GRM690 Group Work Practice II
D 1	GRM701 Physics in daily life	GRM730 Introductory Infrastructure Engineering
	GRM750 Group Work Practice III	
D 2	GRM751 Group Work Practice IV	GRM731 Introductory Earth and Environment Science
		GRM790 Group Work Practice V
D 3		

② Science and Engineering students

	SPRING SEMESTER	FALL SEMESTER
M 1	GRM601 Resource Management for Coexistence and Cultural Diversity	GRM602 Capacity Development for Coexistence and Cooperative Works
M 2	GRM650 Group Work Practice I	GRM690 Group Work Practice II
D 1	GRM702 Introduction to Social Science and Humanity	GRM733 Introductory Qualitative Research Methods
	GRM750 Group Work Practice III	
D 2	GRM751 Group Work Practice IV	GRM735 Introductory Global Studies
		GRM790 Group Work Practice V
D 3		

＊The four courses (GRM 601, GRM 602, GRM 650, GRM 690) for Master Program do not offer prerequisites. The above is one of the examples for the registration.

V. Requirements for Completing the GRM Program

1. Credit requirements

Students enrolled in the GRM Program are required to earn an additional 20 credits as shown in the table below, besides the credits required for the completion of Master's Degree Program and Doctoral Degree Program of their graduate school.

➢ **Humanities and Social Sciences students are required to take the following courses.**
- **4** courses from the course number of the 600s.
- Course number of 701 and 750.
- **2** courses from the course number of 730 or 731 or 732.
- Course number of 751 and 790 with the required grade for course number 790.

➢ **Science and Engineering students are required to take the following courses.**
- **4** courses from the course number of the 600s.
- Course number 702 of and 750.
- **2** courses from the course number of 733 or 734 or 735.
- Course number of 751 and 790 with the required grade for course number 790.

① Humanities and Social Sciences students

Course Number	Course Name
GRM601	Resource Management for Coexistence and Cultural Diversity
GRM602	Capacity Development for Coexistence and Cooperative Works
GRM650	Group Work Practice I（Multi-perspective approach on complex problems）
GRM690	Group Work Practice II（Basic procedures of research projects）
GRM701	Physics in daily life
GRM730	Introductory Infrastructure Engineering
GRM731	Introductory Earth and Environment Science
GRM732	Introductory Laboratory of Infrastructures
GRM750	Group Work Practice III（A solution for real world）
GRM751	Group Work Practice IV（Project design & proposal writing）
GRM790	Group Work Practice V （Autonomous management & a complete solution）

② Science and Engineering students

Course Number	Course Name
GRM601	Resource Management for Coexistence and Cultural Diversity
GRM602	Capacity Development for Coexistence and Cooperative Works
GRM650	Group Work Practice I（Multi-perspective approach on complex problems）
GRM690	Group Work Practice II（Basic procedures of research projects）
GRM702	Introduction to Social Science and Humanity
GRM733	Introductory Qualitative Research Methods
GRM734	Introductory Quantitative Research Methods
GRM735	Introductory Global Studies
GRM750	Group Work Practice III（A solution for real world）
GRM751	Group Work Practice IV（Project design & proposal writing）
GRM790	Group Work Practice V （Autonomous management & a complete solution）

2. Review for recognizing the completion of the GRM Program

In addition to a review to determine the conferral of degree conducted by the respective graduate schools, GRM Students will undergo another review of their performance for the completion of program. The review will be fairly conducted based on GRM Program Achievement Reports and review results will be open to the public.

Details will be announced separately.

VI. Enrollment of GRM courses

1. GRM course enrollment, examinations, performance evaluation

Courses of the GRM Program can be enrolled using the DUET system. Students taking the GRM courses are required to take their examinations under the regular Doshisha University academic-year schedule. Student performance in the GRM courses is evaluated under the same GPA evaluation standard that applies to regular Doshisha University Graduate School courses.

・ For each course of the GRM Program, there are 2 patterns of the course number as below;

① Course number for students who intend to complete the GRM Program.

② Course number for students who do not intend to complete the GRM Program.

The different course number with the same course name covers the same content. Students MUST choose either of the course numbers at the time of registration.

The choice of either of the above can be decided at the time of course registration and switching from the either can be made with the submission of a designated form within the announced submission period before the start of the 4th Semester of the Master Program.

The GRM Program courses have course numbers. In addition, the courses for Doctoral Program provide prerequisites, and it enables students to take courses in a structured/stepwise manner.

e.g.) GRM601 must be completed before taking GRM 701.

＊The courses for Master Program do not offer prerequisite, so that students are able to choose any of the four courses (GRM 601, GRM 602, GRM 650, GRM 690).

＜ N O T E ＞

① Credits earned with the "Course number for students who intend to complete the GRM Program" will **NOT** be calculated as the credits required to receive the diploma of their affiliating Graduate School/Major.

② Credits earned with the "Course number for students who do not intend to complete the GRM Program", students must check their affiliating Graduate School Office as to if or if not the credits earned in the GRM Program will be counted as the required credit number to finish their affiliating Graduate School/Major. The credit count depends on each Graduate School/Major.

③ It is possible to take courses with the **"Course number for students who intend to complete the GRM Program" AFTER** earning some credits with the **"Course number for students who do not intend to complete the GRM Program"**. In this case, the credits previously earned will be counted as the required credits to complete the GRM Program and **NOT** the affiliating Graduate School/Major. Students **MUST** check if this switch will not affect the completion of their affiliating Graduate School/Major **BEFOREHAND.**

④ Students cannot take the same course in the **"Course number for students who intend to complete the GRM Program" and the "Course number for students who do not intend to complete the GRM Program"**. Students **MUST** choose from either.

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2. <u>Upper Limit of Number of Credits that can be registered by GRM Students</u>

    The number of credits that can be registered for the GRM Program is as below.

    The number of credits that can be registered for the GRM Program in 1 Semester is restricted based on the consideration of academic work load of the students' affiliating Graduate Schools/Major. There may be academic counseling before the course registration of the GRM Program.

<N O T E>
GRM students whose past grades of the GRM courses (registered with GRM codes) are judged to be of poor, will be considered as having no intention to complete the GRM Program. It may lead to the rejection as a GRM student after an interview with the student.

(1) Master's Program Students

Upper Limit of GRM Program credits that can be registered **per semester**	Up to 2 credits
Upper Limit of GRM Program credits that can be registered credits **per year**	Up to 4 credits

(2) Doctoral Program Students

Upper Limit of GRM Program credits that can be registered **per semester**	Up to 4 credits
Upper Limit of GRM Program credits that can be registered credits **per year**	Up to 8 credits

※ **Only if permitted by the GRM program,** students may register for courses that exceed the credit limit regardless of the above conditions (1) and (2).

※ Doctoral program students who are in the second semester or after may not join the GRM program.

3. Academic Year 2021: GRM Program Course List

Category	H : For students <u>OTHER THAN</u> the "Graduate School of Science and Engineering". S : For students of the "Graduate School of Science and Engineering". C : For ALL GRM Students.
Year	M : Master's Degree Program / D : Doctoral Degree Program
Campus	I : Imadegawa / T : Kyotanabe (I), (T) : The class can be distributed via TV conference system based on the request of the student. Students **MUST** consult with the course instructor **BEFORE** enrollment.
Intensive	○: Intensive lectures at a specific time
Semester	S : Spring Semester / F : Fall Semester
Language	E: English　（All classes are conducted in English）

＜ N O T E ＞

① **Students of the Doctoral Degree Program** who wish to register the GRM courses offered for Year M1～

(cf. VI - 3. GRM Program Course List), may not register through the DUET system. Students are required to

<u>register at the affiliated graduate school office "DURING THE REGISTRATION PERIOD".</u>

Category		Year	Course	Class	Course numbering	Course Name	Credit	Instructor(s) (main)	Campus	Semester	Language	Note (prerequisite)
Lecture Courses	C	M1～	35610601	000	GRM601	Resource Management for Coexistence and Cultural Diversity	2	**Akira HAYASHIDA** Eiji OYAMADA Shinichiro HAMA Tadashi YAGI Minoru INABA Naoto NAGAOKA Motoi WADA Jiro SENDA Satoshi AKAO Mitsuaki UEDA	T (I)	S	E/J	**NO** prerequisites
	C	M1～	35699601	000								**NO** prerequisites <u>Course number for students who do not intend to complete the GRM Program</u>
	C	M1～	35610602	000	GRM602	Capacity Development for Coexistence and Cooperative Works	2	Mitsuaki UEDA	T (I)	F	E/J	**NO** prerequisites
	C	M1～	35699602	000								**NO** prerequisites <u>Course number for students who do not intend to complete the GRM Program</u>
	H	D1～	45610701	000	GRM701	Physics in daily life	2	Motoi WADA	I	S	E/J	prerequisite GRM601
	H	D1～	45699701	000								prerequisite GRM601 <u>Course number for students who do not intend to complete the GRM Program</u>
	S	D1～	45610702	000	GRM702	Introduction to Social Science and Humanity	2	Seifudein ADEM	I (T)	S	E/J	prerequisite GRM601
	S	D1～	45699702	000								prerequisite GRM601 <u>Course number for students who do not intend to complete the GRM Program</u>
	H	D1～	45610730	000	GRM730	Introductory Infrastructure Engineering	2	Motoi WADA	I	F	E/J	prerequisite GRM701
	H	D1～	45699730	000								prerequisite GRM701 <u>Course number for students who do not intend to complete the GRM Program</u>
	H	D1～	45610731	000	GRM731	Introductory Earth and Environment Science	2	Akira HAYASHIDA	I	F	E/J	prerequisite GRM701
	H	D1～	45699731	000								prerequisite GRM701 <u>Course number for students who do not intend to complete the GRM Program</u>
	H	D1～	45610732	000	GRM732	Introductory Laboratory of Infrastructures	2	Yoki IKEDA	I	S	E/J	prerequisite GRM701
	H	D1～	45699732	000								prerequisite GRM701 <u>Course number for students who do not intend to complete the GRM Program</u>

＊The Courses offered by the GRM program are mainly conducted in English considering language skills of the GRM students.

Category		Year	Course	Class	Course numbering	Course Name	Credit	Instructor(s) (main)	Campus	Semester	Language	Note (prerequisite)
Lecture Courses	S	D1～	45610733	000	GRM733	Introductory Qualitative Research Methods	2	Mitsuaki UEDA	T	F	E/J	prerequisite GRM702
	S	D1～	45699733	000								prerequisite GRM702 Course number for students who do not intend to complete the GRM Program
	S	D1～	45610734	000	GRM734	Introductory Quantitative Research Methods	2	Mitsuaki UEDA	T	S	E/J	prerequisite GRM702
	S	D1～	45699734	000								prerequisite GRM702 Course number for students who do not intend to complete the GRM Program
	S	D1～	45610735	000	GRM735	Introductory Global Studies	2	Eiji OYAMADA	T	F	E/J	prerequisite GRM702
	S	D1～	45699735	000								prerequisite GRM702 Course number for students who do not intend to complete the GRM Program
Exercise-based / Practice Courses	C	M1～	35610650	000	GRM650	Group Work Practice I	2	**Akira HAYASHIDA** Motoi WADA Eiji OYAMADA Mitsuaki UEDA	T (I)	S	E/J	**NO** prerequisites
	C	M1～	35699650	000								**NO** prerequisites Course number for students who do not intend to complete the GRM Program
	C	M2～	35610690	000	GRM690	Group Work Practice II	2	**Masafumi HASHIMOTO** Eiji OYAMADA Mitsuaki UEDA	T (I)	F	E/J	**NO** prerequisites
	C	M2～	35699690	000								**NO** prerequisites Course number for students who do not intend to complete the GRM Program
	C	D1～	45610750	000	GRM750	Group Work Practice III	2	**Akira HAYASHIDA** Jiro SENDA Naoto NAGAOKA Mitsuaki UEDA	I (T)	S	E/J	prerequisite GRM690
	C	D1～	45699750	000								prerequisite GRM690 Course number for students who do not intend to complete the GRM Program
	C	D1～	45610751	000	GRM751	Group Work Practice IV	2	**Eiji OYAMADA** Minoru INABA Mitsuaki UEDA	I (T)	S	E/J	prerequisite GRM750
	C	D1～	45699751	000								prerequisite GRM750 Course number for students who do not intend to complete the GRM Program
	C	D1～	45610790	000	GRM790	Group Work Practice V	2	**Eiji OYAMADA** Naoto NAGAOKA Mitsuaki UEDA	I (T)	F	E/J	prerequisite GRM751
	C	D1～	45699790	000								prerequisite GRM751 Course number for students who do not intend to complete the GRM Program

＊The Courses offered by the GRM program are mainly conducted in English considering language skills of the GRM students.

VII. Financial Support

1. Special Grant for GRM Students

For the details, check the latest "GRM Grant Application Guidelines".

2. Activity Financial Support

GRM Program will also provide GRM students with financial support for activities in AY2019 and onwards.

Some of the GRM courses are combined and given with other Graduate schools, but registration is required based on the GRM course code (The course code listed in the GRM Program Course List of the GRM Program Guide). Financial support will not be given if not enrolled in the GRM course code.

VIII.　GRM Common Rooms and Rental Service of Mobile Devices

GRM Common Rooms, located on the second floor of Shikokan building at Karasuma Campus and the first floor of Hochikan building at Kyotanabe Campus, are available to GRM Students in order to improve students' learning environment. These rooms are equipped with TV conference systems, electronic writing boards, personal computers, video editors and also experiment tools for non-science-field students. TV conference system connects Kyotanabe Campus and Karasuma Campus, enabling students of each campus to remotely receive lectures offered at the other campus. Some of the GRM lectures are recorded by the class recording system and available via online library for GRM Students.

The rental services of Notebook PC and video camera are also available for when such devices are necessary to be used in the fieldwork and other practical training programs.

(1)　Qualifying Students

- GRM Students, and relevant professors and administrative staffs are allowed to use GRM Common Rooms.
Except for this, others may obtain permission to use the rooms.

(2)　Open Hours

- The rooms are open from Monday through Friday
If you use on Saturdays, Sundays and national holidays, prior arrangements are required.
- When GRM classes are being held in the rooms, they are not available for general use. Please note that you may limit to use when GRM Common Rooms are used for lecture events.

(3)　Conduct prohibited in GRM Common Rooms

- The misconducts including drinking and eating are strictly prohibited in the rooms in view of possible damage to equipment and machines
- Please refrain from loud conversation and other behavior that may annoy other users and exercise moderation when using the rooms.

(4) NOTES when using the Computer

・   The rooms are equipped with PCs for general use by GRM Students, etc. Users are therefore not permitted to install software or other content to PCs, or to alter screen display and other configurations at their own discretion. Also the desktop storage of used data in the desktop is banned in terms of information management. Please note that you **MUST** leave the PC **ONLY** after confirming that it is in the same condition as before you used it. Data remaining in the PC after your use will be deleted for the convenience of the next user. The administrator is therefore not responsible for the deletion of data files you may consider important.

・   The same applies to notebook PCs that are used on a rented basis. You **MUST** not carry rented PCs with containing personal information data. If you carry data files, you **MUST** transfer them from PCs to USB memory devices, while ensuring the use of strict security measures such as an encoding. For the convenience of the next user, the administrator will delete the remaining data in the PCs. The administrator is therefore not responsible for any loss that may result from such a deletion.

・   Please return the PCs after confirming that it is in the same condition as before you used it.

(5) NOTES when using the Printers

・   GRM Students are permitted to use printers installed in these rooms to print out necessary documents. However, frequent refilling of paper and toner are not permitted. You should reduce printer use as much as possible from the standpoint of environmental consideration as obtaining necessary information on the PC screen and refraining from printing out massive amounts of paper.

・   When the refilling is necessary, please contact Graduate School of Science and Engineering office or Graduate School of Global Studies office.

(6) Electronic Writing Boards, Videoconference Systems, Interactive White Boards, Infrared Wireless Microphones, Presentation Equipment

・   If you change connections, configurations and other settings of these devices, please undo the changes after use. Please be sure to put everything back in place, if you change wire connections of cables attached to these devices. If the connections are left modified, the next user will be inconvenienced. If you are not capable of undoing changes, please do not modify wire connections and system settings.

・   Electronic writing boards (one white-color model and one black-color model) are available. Students intending use of the boards are advised to use designated PCs.

(7) Rental Equipment

- Students are advised to rent equipment while Graduate School of Global Studies office or Science and Engineering office is open.

- Devices and equipment are rented on a daily basis. When more than one day of rental is necessary, please make reservation as soon as possible. When rented items are moved off campus, please be careful of loss, damage and other potential problems.

- If rented items are lost or damaged, the renter will be required to pay for them, regardless of reason.

- Renters are asked to carefully use not **ONLY** cameras and notebook PCs, but also their accessories and peripherals such as AC adapters, additional batteries, memory devices and cables. If these accessories and peripherals are lost or damaged, the renter will be required to pay for them.

- When devices and equipment requiring electric charging, such as cameras and notebook PCs, are rented, the renter will be asked to finish power charging before actual renting starts.

- Renters are asked to use their SD memories to store visual images from the video camera they used. Video files stored in the video camera will be removed after rental is over.

IX. Security and Risk Management

1. Safety of overseas travel

(1) Before departure: Information collection

① Collecting information through the internet.

Before departure, students **MUST** collect information on the country/area of destination through the Ministry of Foreign Affairs website.

· Ministry of Foreign Affairs website

https://www.anzen.mofa.go.jp/

For reference: The website provides diverse information including risk information, information on specific cities and wide-ranging area information, and it is important to pick up the relevant information to thoroughly understand the area of destination. Through the "risk information" page on the website, gaining an overview of country-specific risks from different angles is possible. Information on specific cities include warnings of any potential outbreaks of assaults by armed guerrilla groups. Wide-ranging area information include warnings of any potential cross-border impact of certain outbreaks such as avian influenza.

Especially for students travelling to an Islamic country (one of the target countries of GRM Program being Islamic), it is necessary to be updated with global Islam-related incidents, because Muslims are found all over the world and their actions against a hostile religious group in a certain country could spread to other areas of the world, possibly affecting the area of destination. Access such broad-area information through the Ministry of Foreign Affairs website, and visit the website before departure.

② **For students with "Japanese citizenship":** Students **MUST** apply for the 「たびレジ」 or the 「在留届」.

Students **MUST** apply in order for the "Ministry of Foreign Affairs" to provide safety information and emergency safety confirmation to the enrolled citizens.

For reference: No more than 3 months ＝ たびレジ、3 months or over ＝ 在留届

· Ministry of Foreign Affairs）たびレジ・在留届 application webpage

https://www.ezairyu.mofa.go.jp/tabireg/

(2) Before Departure: Points to do outside the campus -1-

Students who are intending on staying at a foreign country to study or participate in an internship or in fieldwork, **MUST** check MOFA's "Overseas Travel Safety Information" (http://www.mofa.go.jp/anzen/) of the destination.

> If the "Travel advice and Warning" of destination is
> - Level 1: Exercise caution　or　Level 2: Avoid Non-essential travel
>   Inform the course instructor and academic supervisor and consult for directions. Students who decided to enter the region **MUST** inform the affiliated graduate school office. If students are given permission, GRM will allow the student into the region.
> - Level 3: Avoid all travel　or　Level 4: Evacuate and Avoid all travel
>   GRM does NOT allow students to travel into the region. Students **MUST** change the schedule or research field. The local situation can be changed anytime. Student **MUST** check regularly the safety information and never.

(3) Before departure: Points to do outside the campus -2-

Students **MUST** be a policyholder of an overseas traveler's personal accident insurance. GRM will not permit students to go abroad if not insured.

※ For any inquiries regarding overseas traveler's personal accident insurance, contact the Doshisha Enterprise (TEL: 075-251-3037　http://www.doshisha-ep.co.jp/). (For students at the Kyotanabe Campus, submission documents via post can be accepted.)

(4) During your stay in a foreign country

Students who are staying in a rural area, agricultural village or mountainous region with no advanced telecommunication infrastructure, can use a roaming service provided by a mobile phone company, which enables access to the latest information. As a GRM Student, it is essential to be always updated with local trends of advanced technologies.

2. Insurances covering off-campus seminars and training activities

(1) Student accident insurance (All Doshisha University students are insured.)

This insurance covers on-campus accidents, accidents while commuting to/from the campus, and accidents in a foreign country where students are learning/research activities take place (excluding accidents during private hours). All Doshisha University students automatically become a policyholder of this insurance at the time of enrollment. No additional sign-up is necessary.

(2) Student liability insurance against disasters and accidents

This insurance covers injuries of persons other than the student itself and damage to other persons' assets (such as equipment) that the student cause during their participation in an off-campus seminar or training session, and compensates for damages that student are liable for.

Should the student encounter any accident during participation in a GRM activity, students should contact their affiliating graduate school office or the Student Affairs Division because students will need to complete some paperwork.

For details: http://www.doshisha.ac.jp/students/l_support/insurance.html

Policy for Advanced Doctoral Program in Global Resource Management, Doshisha University

(Aim)

Article 1: The Guidelines for Advanced Doctoral Program in Global Resource Management, Doshisha University (hereinafter referred to as "Program Guidelines") aim to clarify the rules and requirements of the Global Resources Management program (hereinafter referred to as "GRM Program"), which is implemented in accordance with paragraph 7, Article 6 of the Bylaws of Doshisha University Graduate Schools (hereinafter referred to as "Graduate Schools Bylaws").

(Education objectives)

Article 2: GRM Program defines the idea of global resources management in an effort to seek appropriate and fair management and use of natural resources, human resources and social capital, and thereby to build a reliable and better social infrastructure that serves the sustainable development of society and people's peace and security. GRM Program provides graduate students with interdisciplinary education in both science and humanities fields, trains them to deal flexibly with current issues with multiple perspectives using versatile and application skills, and aims to develop human resources who possess abilities to work with others and to provide solutions to problems in society and organizations where multicultural co-existence is accelerating.

(Contents of GRM Program)

Article 3: GRM Program shall be a course of study spanning Master's and Doctoral Degree Programs in which students in Integrated Doctoral Programs defined by item 1 and 2, paragraph 1, Article 3 of Graduate Schools Bylaws may enroll in, in addition to the curriculum of graduate schools in which students are affiliated with.

2   The curriculum of GRM Program shall be operated mainly by the designated departments of the graduate school (hereinafter referred to as "Core Graduate Schools.")

3   Core Graduate Schools are as follows:

Department of Global Studies of Graduate School of Global Studies, Department of Information and Computer Science of Graduate School of Science and Engineering, Department of Electrical and Electronic Engineering of Graduate School of Science and Engineering, Department of Mechanical Engineering of Graduate School of Science and Engineering, Department of Applied Chemistry of Graduate School of Science and Engineering, and Department of Science of Environment and Mathematical Modeling of Graduate School of Science and Engineering

4   The curriculum policy of GRM Program shall be specified in the attached table.

(Operating members)

Article 4: GRM Program shall be implemented by full-time instructors belonging to Core Graduate Schools and the Institute for Advanced Research and Education (hereinafter referred to as "Program Instructors").

2   A person responsible for implementation of GRM Program shall be appointed, and such person shall be referred to as "Program Coordinator."

3   A person responsible for managing the plans and activities of GRM Program may be appointed and such person shall be referred to as "Program Officer."

4   The Program Coordinator shall be recommended by the Dean of the Institute for Advanced Research and Education from among the Program Instructors to the President of Doshisha University, and shall be appointed by the President of Doshisha University.

5   The Program Officer shall be selected from among the Program Instructors and shall be appointed by Program Coordinator.

6   GRM Program Committee established within the Institute for Advanced Research and Education shall be responsible for the operation of GRM Program.

7   GRM Program Committee shall be composed of Program Instructors, and the Program Coordinator shall serve as the chairperson of GRM Program Committee.

8   The responsibilities and obligations of GRM Program Committee shall be specified separately from these Program Guidelines.

(GRM Students)

Article 5: Among students who take courses offered by GRM Program, those who have passed Intermediate Evaluation shall be called GRM students.

2   The number of the aforementioned GRM students shall be 15 at the maximum.

(Curriculum and credits requirement)

Article 6: GRM Program curriculum and credits requirements shall be as specified in the attached table.

(Intermediate Evaluation and Evaluation for Program Certification)

Article 7: GRM Program shall be entitled to conduct Intermediate Evaluation of GRM Program (hereinafter referred to as Intermediate Evaluation) and Evaluation for GRM Program Certification (hereinafter referred to Evaluation for Program Certification) to students who take courses offered by GRM Program.

2   Guidelines for Intermediate Evaluation and Evaluation for Program Certification shall be specified separately from these Program Guidelines.

(Review and certification for recognizing the completion of GRM Program)

Article 8: A review for recognizing the completion of GRM Program shall be implemented on GRM Students who have earned all the required credits as specified by Article 6 above, who have passed the aforementioned Intermediate Evaluation and Evaluation for Program Certification, and who have also submitted a doctoral thesis for a doctorate in accordance with item 1, paragraph 1, Article 8 of Doshisha University Academic Degree Guidelines (hereinafter referred to as "Degree Guidelines").

2   GRM students who have passed the aforementioned Program Completion Evaluation, and who are recognized by Committee of Graduate School Deans, through discussion of its members, shall be accredited by the President of Doshisha University.

(Diploma)

Article 9: A diploma to be conferred on students who have successfully completed GRM Program in accordance with paragraph 3 of Article 11 of Degree Guidelines shall be issued as specified in the attachment hereto.

(Miscellaneous provision)

Article 10: Any matters not specified hereunder shall be determined by GRM Program Coordinator as necessary.

(Administration)

Article 11: The Office of the Institute for Advanced Research and Education shall be responsible for administration of Program Guidelines.

(Revision and repeal of the Program Guidelines)

Article 12: Any revision and repeal of these Program Guidelines shall be deliberated by the committee members of the Institute for Advanced Research and Education and shall be determined by the Doshisha University Council.

Supplementary Provision
1. These Program Guidelines shall become effective on April 1, 2019.
2. With regard to students who were selected as GRM students by March 31, 2019, the policy prior to the revision shall remain in effect.

Appended Table

The Curriculum Policy of GRM Program

Advanced Doctoral Program in Global Resource Management (hereinafter referred to as "GRM program") provides a new research field, which is unified with the infrastructure of physical, social, and spiritual dimensions. The GRM Program focuses on "Global Resource Management (GRM)" and cultivates students to be able to have a higher perspective of their research filed with an original and academic angle with this new research field as an add-on education program. Group work/onsite practice with the versatile theme related to "Infrastructure science/resource" will be conducted to function as a node to connect all Graduate School students studying multidisciplinary collaboration, cooperation, problem-based thinking, and to cultivate all-around leaders with a high level of expertise of a flexible and applied skill.

Knowledge / Skill

The GRM Program provides courses which enables students to have a cross border perspective and mind with a foundation of understanding diversity and high applicability, and cultivates the ability for self-directed expansion of knowledge and skill. Provides courses as an interdisciplinary coeducation field, and learn how to distribute common resource of human society, and acquire how to discover the solutions by learning together.

Cogitation / Judgement / Expressiveness

Humanities and Social Sciences and Science and Engineering students will study/discuss together to solve composite tasks through practical exercises to gain different aspects of knowledge and ideas. By students of different study areas studying together with the provided courses, the students will strengthen multilateral cogitation, judgment with higher perspective, expressiveness to have mutual understanding with one another, persuasiveness, and adjusting power which is required as a universal strength for all Graduate School students.

Independence / Diversity / Cooperativeness

The program will provide courses with Issue focused and Solution oriented education methods to acquire the attitude for independent problem solving. Using group work effectively to solve composite problems, the program will provide collaborative work with multilateral perspectives to learn cooperativeness.
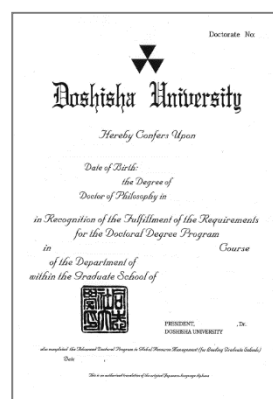
Course Numbering	Curriculum	Credit
601	Resource Management for Coexistence and Cultural Diversity	2
602	Capacity Development for Coexistence and Cooperative Works	2
701	Physics in daily life	2
702	Introduction to Social Science and Humanity	2
730	Introductory Infrastructure Engineering	2
731	Introductory Earth and Environment Science	2
732	Introductory Laboratory of Infrastructures	2
733	Introductory Qualitative Research Methods	2
734	Introductory Quantitative Research Methods	2
735	Introductory Global Studies	2
650	Group Work Practice I	2
690	Group Work Practice II	2
750	Group Work Practice III	2
751	Group Work Practice IV	2
790	Group Work Practice V	2

Credits requirements for completing GRM Program

To complete the GRM Program, it is necessary to earn a total of 20 credits or more from among the courses listed in the above course list in accordance with the GRM Course Numbering specified in the Program Guide for Advanced Doctoral Program in "Global Resource Management", in addition to credits required by Bylaws of Doshisha University Graduate Schools as specified in Table II attached to Bylaws.

Appended Form

(Note)   This Policy for Advanced Doctoral Program in Global Resource Management, Doshisha University is a proper translated version of the original Policy for Advanced Doctoral Program in Global Resource Management, Doshisha University which is written in Japanese

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