

## **Disaster Management Policy Program (DMP)**

### **Purpose of the Program**

The Disaster Management Policy Program is a degree program that aims to develop highly skilled professionals who are expected to play an active role in disaster management policy in developing countries. The program is implemented by the collaboration between the National Graduate Institute for Policy Studies (GRIPS), the Building Research Institute, the Public Works Research Institute and the Japan International Cooperation Agency, from the perspective of contributing to this field in developing countries.

### **Diploma Policy**

This program confers a degree in Disaster Management (Master of Disaster Management) on students who have enrolled for at least the required number of years, have acquired the required number of credits based on the curriculum of the program, have written and given a presentation on a research paper on specific policy issues, and have obtained an overall pass for his or her studies.

In this program, students should acquire the following qualities and abilities:

1. Ability to identify problems by analyzing issues from multiple perspectives with the expertise in disaster management policies
2. Ability to conduct policy analysis for problem solving based on academic analysis from multiple perspectives with the wide-range of knowledge on disaster management policies
3. Ability to make policy recommendations for practical solutions based on a deep understanding of the current state of theory and practice
4. Ability to identify an issue, analyze related data using engineering tools, compile them into research papers and policy recommendations, and present them
5. Ability to play an active role as a balanced leader based on a deep understanding of different values and systems in a global society

# **Curriculum Policy**

## **【Basic Policy】**

With the cooperation of the Building Research Institute (Seismology, Earthquake Engineering, Tsunami Disaster Mitigation Course) or the Public Works Research Institute (Water-Related Disaster Management Course), the Disaster Management Policy Program aims to develop human resources who have advanced expertise in both theory and practice and who can analyze data and translate it into effective policy formulation and implementation by having them acquire advanced knowledge and skills related to disaster management, in parallel with practical subjects.

## **【Structure of the Curriculum】**

This program is a 12 month program with a curriculum designed to enable students to gradually broaden and deepen their understanding of subjects by taking them in stages. Students plan their courses for the year through the program guidance they receive at the time of admission. The curriculum consists of required subjects, recommended subjects, and elective subjects. Furthermore, students use the knowledge and skills they have learned so far on specific policy issues to compile and present papers as a single issue analysis and policy recommendation.

## **(Required Courses)**

In the required courses, students acquire basic and advanced specialized knowledge required for the degree of disaster management. In the seminar-style courses, which are part of the required courses, students go to the field and listen to the talk of people who are actually engaged in the work, and take classes in the form of workshops and discussions to review issues from different perspectives as practitioners and gain more practical knowledge through visits to the most advanced fields. By learning both theory and practice throughout the year, the curriculum is designed to enable students to acquire a high level of expertise and practical skills in disaster management.

## **(Elective Courses)**

Elective courses focus on technical and practical subjects related to disaster management so that students can learn subjects related to their areas of interest. In consultation with their mentor, faculty members, students will select courses from these courses that match their research themes and deepen their knowledge of the writing of their policy papers.

## **(Research Guidance)**

In the individual guidance of students, research guidance is provided by a multiple number of main and sub-supervisors.

## **【Policies on Education and Study Methods】**

Of the 30 credits required to complete this program, 10 credits are in seminar-style. The recommended courses for the Seismology, Earthquake Engineering and Tsunami Disaster Prevention Course are 6 credits, and for the Water Disaster Risk Management Course are 16 credits. Most of the lectures are conducted in small groups, and active participation in classes is encouraged. Therefore, students are required not only to gain knowledge through passive learning, but also to actively participate in discussions in lectures and to theoretically integrate their practical experience and knowledge with new knowledge, thereby deepening their understanding and enhancing the quality of learning.

## **【Assessment Policy】**

In the assessment of academic achievement in each course, students are evaluated for their knowledge acquisition and understanding and practical skills in principle, taking into consideration their contribution to the class, examination, report submission, etc., and their overall ability is evaluated through the writing of papers for specific research subjects.

## **Admissions Policy**

### Target Students

This program accepts government officials, engineers, researchers, etc. who are willing to learn advanced knowledge as experts in the fields of earthquakes, tsunamis, water disasters, and disaster management in developing countries, and to actively make policy and recommendations, and

to contribute to national and regional development.

Prior to admission, students are required to have knowledge of relevant fields at a university undergraduate level and to have academic English proficiency. It is also desirable to have at least three years of practical experience in related fields.

### Evaluation methods and Standards

#### [Screening by documents]

Screening will be done based on the application documents.

The selection process is based on a comprehensive evaluation of past work experience, the content of evaluations by the 2 nominees, university (bachelor's) degrees, study content and grades, originality of research plans and relevance to realistic policy issues, concreteness of questions, content of master's theses, etc., and English proficiency sufficient to write theses.

#### [Interview]

We will have a video interview. At the interview, applicants will be asked to answer the questions and the criteria for screening will include the applicant's logic, accuracy, sense of purpose for policy issues, willingness to study, clarity of their career plans after graduation, and English communication abilities.

**Curriculum Map: Disaster Management Policy Program (DMP)**

**Seismology, Earthquake Engineering and Tsunami Disaster Mitigation Course**

			Diploma Policy 1	Diploma Policy 2	Diploma Policy 3	Diploma Policy 4	Diploma Policy 5
Category	Course No.	Course Name	1. Ability to identify problems by analyzing issues from multiple perspectives with the expertise in disaster management policies	2. Ability to conduct policy analysis for problem solving based on academic analysis from multiple perspectives with the wide-range of knowledge on disaster management policies	3. Ability to make policy recommendations for practical solutions based on a deep understanding of the current state of theory and practice	4. Ability to identify an issue, analyze related data using engineering tools, compile them into research papers and policy recommendations, and present them	5. Ability to play an active role as a balanced leader based on a deep understanding of different values and systems in a global society
I Required Courses	DMP4000E	Individual Study	○	○	○	○	
II Recommended Courses	DMP2000E	Disaster Management Policies A: from Regional and Infrastructure Aspect		○	○	○	○
	DMP2010E	Disaster Management Policies B: from Urban and Community Aspect		○	○	○	○
	DMP3000E	Earthquake Hazard Assessment A	○	○		○	
	DMP3010E	Earthquake Risk Assessment	○	○		○	
	DMP3030E	Tsunami Hazard Assessment	○	○		○	
	DMP3040E	Tsunami Countermeasures	○	○		○	
	DMP3050E	Earthquake Hazard Assessment B	○	○		○	
III Elective Courses	DMP3200E	Earthquake Phenomenology	○		○	○	
	DMP3210E	Characteristics of Earthquake Disasters	○		○	○	
	DMP3220E	Earthquake Circumstance	○		○	○	
	DMP3230E	Information Technology Related with Earthquakes and Disasters	○		○	○	
	DMP3400E	Structural Analysis	○		○	○	
	DMP3410E	Ground Vibration and Structural Dynamics	○		○	○	
	DMP3420E	Seismic Structures	○		○	○	
	DMP3430E	Seismic Evaluation and Seismic Design Code	○		○	○	
	DMP3600E	Theory of Tsunami	○		○	○	
	DMP5310E	Case Study (Practice for Earthquake Disaster - Recovery Management Policy I)	○		○	○	
	DMP5320E	Case Study (Practice for Earthquake Disaster - Recovery Management Policy II)	○		○	○	
	DMP5330E	Case Study (Practice for Earthquake Disaster - Recovery Management Policy III)	○		○	○	
	DMP5340E	Case Study (Practice for Tsunami Disaster Mitigation Policy)	○		○	○	
			Selected Topics in Policy Studies I-IV				
		Courses not listed on this table					

**Water-related Disaster Management Course**

			Diploma Policy 1	Diploma Policy 2	Diploma Policy 3	Diploma Policy 4	Diploma Policy 5
Category	Course No.	Course Name	1. Ability to identify problems by analyzing issues from multiple perspectives with the expertise in disaster management policies	2. Ability to conduct policy analysis for problem solving based on academic analysis from multiple perspectives with the wide-range of knowledge on disaster management policies	3. Ability to make policy recommendations for practical solutions based on a deep understanding of the current state of theory and practice	4. Ability to identify an issue, analyze related data using engineering tools, compile them into research papers and policy recommendations, and present them	5. Ability to play an active role as a balanced leader based on a deep understanding of different values and systems in a global society
I Required Courses	DMP4800E	Individual Study	○	○	○	○	
II Recommended Courses	DMP2000E	Disaster Management Policies A: from Regional and Infrastructure Aspect		○	○	○	○
	DMP2010E	Disaster Management Policies B: from Urban and Community Aspect		○	○	○	○
	DMP2800E	Hydrology	○	○		○	
	DMP2810E	Hydraulics	○	○		○	
	DMP2820E	Basic Concepts of Integrated Flood Risk Management (IFRM)	○	○		○	
	DMP2870E	Urban Flood Management and Flood Hazard Mapping	○	○		○	
	DMP3810E	Flood Hydraulics and River Channel Design	○	○		○	
	DMP3820E	Mechanics of Sediment Transportation and Channel Changes	○	○		○	
	DMP3840E	Control Measures for Landslide & Debris Flow	○	○		○	
DMP2900E	Socio-economic and Environmental Aspects of Sustainability-oriented Flood Management	○	○		○		
III Elective Courses	DMP1800E	Computer Programming	○		○	○	
	DMP2890E	Practice on Flood Forecasting and Inundation Analysis	○		○	○	
	DMP3802E	Practice on GIS and Remote Sensing Technique	○		○	○	
	DMP3900E	Site Visit of Water-related Disaster Management Practice in Japan	○		○	○	
	DMP3910E	Practice on Open Channel Hydraulics	○		○	○	
		Selected Topics in Policy Studies I-IV					○
		Courses not listed on this table					