Disaster Management Program (DM)

Purpose of the Program

The Disaster Management Program, implemented in collaboration with the Public Works Research Institute and the Japan International Cooperation Agency, is a doctoral degree program designed to develop leading practitioners and researchers with advanced expertise who are expected to play an active role in the field of water disaster risk management in developing countries in the future.

Diploma Policy

This program confers a degree in Disaster Management (Ph.D. in 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 doctoral dissertation 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 and delineate on-site problems by surveying the gap between the ideal state and the current state from multiple perspectives with the expertise in disaster management policies.
2. Ability to make maximum use of available tools, and/or develop new one to explore, collect, archive, search and integrate scientific data and information as well as information of experiences, including good practices and success/failure stories, and facilitate effective risk communications.
3. 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.
4. Ability to make policy recommendations for practical solutions based on a deep understanding of the current state of theory and practice.
5. Ability to nurture creativity with which to help on-site stakeholders develop their ability to solve problems by themselves.
6. 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】

The Disaster Management Program, in cooperation with the Public Works Research Institute, fosters the development of human resources who have advanced expertise in both theory and practice, who can analyze data and translate it into effective policy formulation and implementation by having them acquire advanced knowledge and skills related to water disaster risk management, in parallel with practical subjects.

【Structure of the Curriculum】

The curriculum of this 36 month program is designed to allow students to gradually broaden and deepen their understanding by taking subjects in stages. Students plan their courses for the 3 years through the program guidance they receive at the time of admission.

At the end of the first year of the doctoral program, each student is expected to submit a thesis proposal and pass a Qualifying Examination (QE). In order to be eligible for the doctoral dissertation QE, the student must earn a minimum of 8 credits from among the courses offered, not only at GRIPS and ICHARM, but also at the University of Tokyo. In addition, the student's supervising committee may advise the student to take up to 4 credits from Category III. After passing the QE, the student can begin dissertation work in the second academic year, with the aim of completing it by the end of the third year.

After starting work on her/his dissertation, the student is required to attend a Ph.D./doctoral candidate seminar to report on the research that she/he is planning or already pursuing. At the end of the third year, to complete the doctoral course work, each student is required to present the results of his/her research in a Ph.D./doctoral thesis defense, and demonstrate the validity, relevance, and academic contribution of the findings.

(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 dissertation.

【Policies on Education and Study Methods】

In this program, all 8 credits required to complete the course are elective courses, and students take coursework through lectures as well as classes in the form of exercises and practical training. Most of the lectures are conducted in small groups, and "active participation in classes" is considered in the evaluation of grades. 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 subject, the acquisition and understanding of knowledge and practical skills are evaluated relatively in principle after taking into consideration attendance, contribution to classes, examinations, and submission of reports, and overall ability is evaluated through the writing of papers on specific subjects.

Admissions Policy

Target Students

This program will accept public officials, engineers, researchers, etc. who are eager to learn advanced knowledge, actively make policy proposals, and contribute to the development of countries and regions as experts in the field of water disaster risk management in developing countries.

Prior to admission, students are required to have knowledge of relevant fields taught at a university undergraduate and Master's level and to have academic English proficiency.

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 and Master’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 Program (DM)

			Diploma Policy 1	Diploma Policy 2	Diploma Policy 3	Diploma Policy 4	Diploma Policy 5	Diploma Policy 6
Category	Course No.	Course Name	1. Ability to identify and delineate on-site problems by surveying the gap between the ideal state and the current state from multiple perspectives with the expertise in disaster management policies.	2. Ability to make maximum use of available tools, and/or develop new one to explore, collect, archive, search and integrate scientific data and information as well as information of experiences, including good practices and success/failure stories, and facilitate effective risk communications.	3. 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.	4. Ability to make policy recommendations for practical solutions based on a deep understanding of the current state of theory and practice.	5. Ability to nurture creativity with which to help on-site stakeholders develop their ability to solve problems by themselves.	6. Ability to play an active role as a balanced leader based on a deep understanding of different values and systems in a global society.
III Elective Courses	DEV2020E	Supply Chain Management for Infrastructure Planners		○	○	○	○	○
	DMP2800E	Hydrology	○	○	○		○	
	DMP2810E	Hydraulics	○	○	○		○	
	DMP7001E	Advanced Disaster Management Policies A: from Regional and Infrastructure Aspect		○	○	○	○	○
	DMP7011E	Advanced Disaster Management Policies B: from Urban and Community Aspect		○	○	○	○	○
	DEV7501E	Advanced Infrastructure and Regional Development: Lessons from the Past		○	○	○	○	○
	DMP7821E	Advanced Integrated Flood Management	○	○	○		○	
	DMP7871E	Advanced Urban Flood Management and Flood Hazard Mapping	○	○	○		○	
	DMP7901E	Socio-economic and Environmental Aspects of Advanced Sustainability-oriented Flood	○	○	○		○	
	DMP8811E	Advanced Flood Hydraulics and River Channel Design	○	○	○		○	
	DMP8821E	Advanced Mechanics of Sediment Transportation and River Changes	○	○	○		○	
	DMP8830E	Advanced Hydrometeorology	○	○	○		○	
	DMP8840E	Advanced Hydrodynamics	○	○	○		○	
	DMP8850E	International Policies on Water and Disasters		○	○	○	○	○
		Courses not listed on this table						