Seismology, Earthquake Engineering, and Tsunami Disaster Mitigation
地震学・耐震工学・津波防災

Updated

Target Countries : Earthquake and Tsunami disaster prone countries and regions

Course No. : J1804028 **No. :** 1884482

Sector : Water Resources/Disaster Management/Earthquake Disaster

Sub-Sector :

Language : English

Outline

Developing countries are vulnerable to threats of earthquakes and tsunamis. This course aims to increase capacities of officials, engineers or researchers who are conductive to earthquake and tsunami disaster management. In this course, participants will acquire Japan's leading knowledge and technologies on seismology, earthquake engineering and tsunami disaster mitigation.

Objective/Outcome

【Objective】
This course aims to increase capacities of technical officials, engineers and researchers in the fields of seismology, earthquake engineering and tsunami disaster mitigation who are conductive to earthquake and tsunami disaster management and disaster recovery policy.

【Outcome】
1. To acquire basic concepts and theories on seismology, earthquake engineering or tsunami which are essential to establish the earthquake disaster mitigation scheme.
2. To acquire basic concepts and theories on seismic/tsunami hazard estimation, disaster management and disaster recovery policy in the fields of seismology, earthquake engineering or tsunami disaster mitigation.
3. To complete a master thesis for solving problems in participant's country applying techniques and knowledge acquired in the course.

Target Organization / Group

【Target Organization】
Governmental Organizations, Research Institutes or Universities having public interest in seismology, earthquake engineering or tsunami disaster mitigation

【Target Group】
1. Technical officials, engineers or researchers who have university degrees in seismology, earthquake engineering, tsunami or equivalent
2. Employees with more than 3 years of working experience
3. Have a competent command of English (TOEFL iBT 79 or above)
4. Be well versed in advanced mathematics

Contents

<Preliminary Phase in home country>
To draft an Inception Report on seismology, earthquake engineering or tsunami disaster mitigation by analyzing disaster management and disaster mitigation policies of participant's country.

<Phase in Japan>
1. Lectures, practices and field trips on basic subjects (Information Technology related to earthquake and disasters, Earthquake Phenomenology, Soil Mechanics, Structural Mechanics) and advanced subjects (Earthquake Circumstance, Characteristics of Earthquake Disasters, Seismic Design, Seismic Evaluation and Retrofitting, Tsunami generation by earthquake, tsunami propagation and its run-up procedure)
2. Lectures, practices and field trips on Seismic/Tsunami Hazard and Risk Assessment, Seismic/Tsunami Disaster-Recovery Management Policy, Tsunami Early Warning System, Disaster Mitigation and Development Assistance.
3. Individual Study: Writing a Master thesis applying knowledge and techniques acquired in the course with supervisors' instructions.

Course Period	2018/9/30～2019/9/13
Department in Charge	Global Environment Department
JICA Center	JICA Tsukuba(Training)
Cooperation Period	2018～2020

Implementing Partner	Building Research Institute
Remarks and Website	On the completion of required credits, participants will be awarded a Master's Degree in Disaster Management by GRIPS. IISEE, Building Research Institute http://iisee.kenken.go.jp/