National Center for Disaster Prevention
Courses for japanese students
Nichiboku program③～⑥

Direction	Number of interns	Languaje	Profiles	Name and contents of the Course	Objective
Direction of research	1	English	Bachelor's Degree in Earth Sciences, management of Geographic Information Systems	**Title:** ③ **Slope instability analysis techniques** **Contents:** • Rain thresholds • Susceptibility estimation formats • Susceptibility and danger maps 10:00 to 14:00 h	Provide the participant with the knowledge and skills necessary to identify, evaluate and analyze the factors that contribute to slope instability, as well as to apply cartographic, geotechnical and geological analysis techniques with the purpose of preventing and mitigating damage in the event of these. phenomena.
Direction of Analysis and Risk Management	1	English	Chemical engineer, biochemical engineer, biologist or with interests focused on biotechnology and work in physicochemical	**Title:** ④ **Analytical techniques of the Environmental Samples Laboratory** **Contents:** • Physicochemical analysis of water from springs near active volcanoes	Train participants in carrying out detailed and specific physicochemical analyzes to evaluate the quality and composition of

			analysis laboratories.	• Bioremediation techniques • Bioremediation of soils contaminated with hydrocarbons • Treatment of water contaminated with salts (metals) • Monitoring parameters during bioremediation 10:00 to 14:00 h	waters from springs located in regions close to active volcanoes. In addition, they will acquire knowledge about water and soil bioremediation techniques to reduce the population's exposure to hydrocarbons and metals.
Direction of Technical Services	1	English	International Relations specialist or lawyer with a focus on international affairs	⑤ **International Cooperation for Disaster Risk Reduction** Module 1. Foundations of Disaster Risk Reduction • Key concepts of disaster risk, vulnerability, exposure and resilience • Evolution of the DRR agenda • Climate change and compound disasters • Introduction to the Sendai Framework for Disaster Risk Reduction 2015–2030 Module 2. International Cooperation and Global Governance • International	To provide participants with a comprehensive understanding of international cooperation mechanisms, governance frameworks, and strategic approaches for Disaster Risk Reduction (DRR), strengthening their capacities to promote coordination, resilience, and collaborative action at the national, regional, and

				cooperation mechanisms in DRR • Bilateral, regional and multilateral cooperation • International agreements and coordination mechanisms 10:00 to 14:00 h	international levels.
Direction of instrumentation and computing	1	English	Upper technical/professional degree in Electrical Engineering, Electronics, Geophysics or related fields.	⑥ **Monitoring Systems for Natural Phenomena** Contents: • Module 1. Early Warning Systems in Mexico • Module 2. Laboratory of Natural Phenomena Monitoring • Module 3. Seismic Instrumentation • Module 4. Volcanic and Hydrometeorological Instrumentation 10:00 to 14:00 h	Provide participants with the theoretical knowledge of monitoring systems applied to natural phenomena, including seismic, volcanic and hydrometeorological instrumentation, as well as early warning systems in Mexico, enabling them to understand their operation, installation and application for disaster risk reduction