SCHOLARSHIP ANNOUNCEMENT

INTERNATIONAL COURSE

VOLCANOLOGY: PROCESSES, THREAT AND MITIGATION IN THE CONTEXT OF CRISIS

3RD EDITION ONLINE – 2026

From August 17 to September 9, 2026

Call for applications available at https://www.agcid.cl

Chilean Agency for International Cooperation for Development | AGCID

BACKGROUND

Latin America and the Caribbean is the second most disaster-prone region in the world (United Nations Office for the Coordination of Humanitarian Affairs, 2020). These events pose threats not only to people's lives and property, but also to the sustainable development of countries, as they can reverse social and economic progress, erode resilience, and increase the vulnerability of communities.

In this context, Chile has promoted international cooperation initiatives aimed at strengthening capacities in disaster risk management. Among these, the Project for Building Resilience and Sustainable Societies in the Face of Disasters in Latin America – KIZUNA – stands out. Developed by the Chilean Agency for International Development Cooperation (AGCID) and the Japan International Cooperation Agency (JICA), this project trained thousands of professionals and technicians from Latin America and the Caribbean between 2015 and 2025.

To further these efforts, AGCID is promoting the international course “Volcanology: Processes, Threats, and Mitigation in Crisis Contexts” in partnership with the Faculty of Physical and Mathematical Sciences of the University of Chile. This institution is dedicated to the generation, development, integration, and communication of knowledge in basic sciences, engineering, earth sciences, and economics and management through teaching, research, and outreach activities of international excellence. The course aims to strengthen professional, institutional, and public policy capacities to contribute to the development of communities that are better prepared and more resilient to volcanic threats.

GENERAL INFORMATION

HIGHER GOAL

Promote policies, strategies, programs and collaborative actions with countries in Latin America and the Caribbean in accordance with the action priorities of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Sustainable Development Goals (SDGs 2030).

II. COURSE OBJECTIVES

- To provide the necessary tools to understand and analyze volcanic activity, understanding that it corresponds to a natural process that strongly interacts with society, having the capacity to generate dangers and damage to life and infrastructure.
- To train students in the management of volcanic crises so that they can have an active and informed role in the evaluation of public policies and programs, using real data and cases that allow them to identify good practices and recognize the relevance and limitations of each technique.

III. EXPECTED RESULTS

At the end of the course, participants will acquire the following skills:

i. Understands and applies fundamental concepts of physical volcanology to analyze the interrelationship between volcanological parameters, types of eruptions, and associated hazards. ii. Understands and applies the fundamental concepts of volcanic monitoring techniques and their application in crisis situations to anticipate hazards and assist in decision-making.

iii. It uses, in a basic way, different computational tools for the zoning of volcanic hazards.

iv. Apply and synthesize the knowledge acquired to analyze case studies of past volcanic eruptions. It is expected that the student will be able to actively participate in their corresponding role during volcanic crises in the future, in conjunction with experts and civil authorities.

IV. COURSE FORMAT

- The course will last four weeks, from August 17 to September 9, 2026.
- The course will be conducted in a synchronous online format.
- The course will be conducted in Spanish.

V. BENEFITS OF THE SCHOLARSHIP

The Program will finance1 :

ÿ Tuition and program fees.
ÿ Certificate of approval.

VI. INVITED COUNTRIES AND/OR ORGANIZATIONS

The governments of the following countries and regions will be invited to nominate candidates for the course: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Dominican Republic and Uruguay and the following CARICOM Member States: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

VII. TOTAL NUMBER OF PARTICIPANTS

The total number of participants from invited countries will not exceed 25 in total2 and there are no pre-established quotas per country.

VIII. APPLICATION REQUIREMENTS

The international course is aimed at people who meet the following application requirements:

Applicant qualifications:

i. To be a citizen of the country where the application is being made and to have residency in one of these countries. If you are temporarily in a country other than your country of citizenship, you must apply through the focal point of the country of which you are a citizen.

ii. To be nominated by your Government in accordance with the procedures indicated in paragraph IX.

iii. Hold a university degree related to engineering or earth sciences.

iv. Possess work experience in the public or private sector, in the field of earth sciences, geological hazard assessment, engineering or disaster risk reduction, or failing that, have basic knowledge of earth sciences, ideally from degrees related to the field of geology or engineering.

v. Professionals working in relevant institutions in the field of earth sciences or disaster risk management.

vi. Have access to the internet for at least 8 hours per week for online classes.

Important note:

Priority in the selection process will be given to candidates who are working on projects related to the national development of their country.

1. No additional items beyond those mentioned above will be funded. Personal expenses must be covered by each participant.

2 This academic program requires a minimum number of participants in order to be taught and, due to force majeure, may experience changes in its programming, teaching team and/or delivery method. Any changes will be reported by the course coordinator.

IX. APPLICATION PROCESS

Candidates must submit their application, along with all requested information, digitally via email (a complete copy of their application, including signatures and seals) to the focal point in their country of origin (Annex VI) for official processing. The required documents are as follows:

a) Application form (Annex I);
b) Proposed action plan (Annex II);
c) Letter of commitment (Annex III);
d) Employment certificate (Annex IV);
e) Letter of institutional commitment (Annex V)
f) Title certificate

Interested parties must submit their applications to the respective focal point in each country (see list of focal points in Annex VI) to formalize their application. **Applications received without formalization by the focal point will not be considered in the selection process.**
Each focal point will determine the deadline for submitting applications; therefore, it is the responsibility of each applicant to consult directly with the focal point in their country (Annex VI) regarding the respective application deadline. These deadlines may vary from country to country.

This call for applications for the international course will have the following stages and reference application dates:

Stage	**Dates**
Closing of the call for applications *(for applicants, after confirmation with the focal point)*	July 22, 2026
Candidate pre-selection and application submission to the Scholarship Platform AGCID *(for focal point)*	July 24, 2026
Selection Committee	July 27-28, 2026
Publication of results and notification to selected candidates	July 31, 2026

The final date for receipt of applications by AGCID expires without exception on July 22, 2026, although it may be closed before the date indicated by the AGCID focal point of each country, so it must be confirmed in the country of origin of each applicant, according to the contacts in Annex VI.

PLEASE NOTE: ÿ

No incomplete, illegible, or late applications will be processed.

ÿ Only applications officially submitted by the focal point will be evaluated. No application submitted directly by the applicant will be considered, even if it has an acceptance letter from the country of origin.

ÿ It is the responsibility of the applicants to carefully read the call for applications with all its requirements, application procedures and all attached documents; as well as to submit their application complying with the professional requirements specified in each offer.

ÿ The data expressed in the application form and its respective annexes have the character of a sworn statement, therefore, in the case of having falsified, adulterated, hidden or presented inaccurate information in order to obtain the scholarship, the applicant will assume the respective administrative, civil and criminal sanctions, in accordance with the regulations of his/her country of origin. Furthermore, the applicant will be ineligible to apply to future calls for proposals indefinitely. This must be communicated by the Committee formed for the implementation of the scholarship.

X. SELECTION

The selection will be made by a Technical Committee comprised of representatives from AGCID and the University of Chile. This same Committee may assess the appropriateness of including other experts in natural disasters and/or public investment.

The results of the selection will be published on July 31, 2026 on the AGCID website, available at www.agcid.cl, for the information of all interested parties.

The University of Chile will contact each selected person by email to notify them, according to the contact information provided in the application form, and will directly coordinate all the arrangements related to their participation.

Important: Only those selected will be notified and, once they have confirmed acceptance of the scholarship, they will be sent a guide with the corresponding instructions and procedures to follow.

The final decision regarding who receives the scholarship is the sole responsibility of the Selection Committee and this decision is final.

XI. REGULATION

Those selected must respect the following rules:

- ÿ Complete all the necessary procedures for your participation in the program, including the obtaining authorization from your superior or others.
- ÿ Provide current contact information (Annex I: Application Form) and periodically check your email accounts, in case of official requests and notices from the coordinating team, according to the dates described in section IX.
- ÿ Strictly adhere to the course program. Requests for changes or alterations to the initially established course program will not be accepted.
- ÿ Respect the instructions given by teachers and ensure good coexistence among the scholarship recipients of the course.
- Actively participate in synchronous sessions with your camera on and attend 75% of them. Absences will be authorized in duly justified cases.

XII. COURSE PROGRAM

Course Name		Volcanology: Processes, threat and mitigation in a crisis context			
Number of participants		Maximum of 30 participants			
Duration		30.5 hours			
Module	**Date and time**	**Duration**	**Learning objective**	**Format, activities**	**Responsible**
Module 1: Basic concepts of physical volcanology	Class 1: Monday, August 17, 2026 14:30 to 18:00 hrs.	30 minutes	**Opening Ceremony** **Goal:** To acquire or complement knowledge about the importance of investment in human capital formation for capacity building in countries.	Welcome from the Agency Chilean Cooperation International for the Development (AGCID) and the University of Chile (UCH)	AGCID/UChile
		3 hours	**Start of classes** **Goal:** To acquire or supplement knowledge about the origin and occurrence of volcanism on Earth, its main manifestations and the factors that control it.	Concepts of physical volcanology such as magma generation, ascent of and storage, role volatiles, eruptive styles and volcanic processes.	Prof. Angelo Castruccio

			type and extent of eruptions.		
	Class 2: Wednesday, August 19, 2026 15:00 to 18:00 hrs.	3 hours	**Goal:** To acquire or complement knowledge about the origin and occurrence of volcanism on Earth, its main manifestations and factors that control the type and extent of eruptions.	Concepts of physical volcanology such as magma generation as ascent and storage, role of volatiles, eruptive styles and volcanic processes.	Prof. Angelo Castruccio
	Class 3: Friday, August 21, 2026 10:30 to 12:00 hrs.	1.5 hours			Prof. Angelo Castruccio
Module 2: Hazards associated with volcanic eruptions and their zoning	Class 4: Monday, August 24, 2026 15:00 to 18:00 hrs.	3 hours	**Goal:** To recognize the main hazards associated with volcanic activity. To analyze the main factors that They control their scope and effects in terms of lethality and damage to infrastructure. Achieve advanced user proficiency in the use of computer programs for simulating volcanic hazards and apply them to hazard zoning in a given area.	Review of the main hazards associated with volcanic eruptive activity: columns and pyroclastic fall, pyroclastic flows, lavas, lahars, volcanic avalanches, volcanic tsunamis. gases, and earthquakes The maps will be introduced geological and hazard maps in volcanic areas, in order to identify the areas most susceptible to being affected by the different processes and their relationship with urban settlements, infrastructure and cultural aspects of society. Existing models for the zoning of different volcanic hazards, such as LAHARZ, ASH3D, LAHARFLOW, and the energy cone method, will be applied. Various case studies of volcanoes in Latin America and the Caribbean will be analyzed.	Prof. Angelo Castruccio
	Class 5: Wednesday, August 26, 2026 15:00 to 18:00 hrs.	3 hours			Prof. Angelo Castruccio
	Class 6: Friday, August 28, 2026 10:30 to 12:00 hrs.	1.5 hours			Prof. Angelo Castruccio

Module 3: Volcano monitoring techniques	Class 7: Monday, August 31 15:00 to 18:00 hrs.	3 hours.	**Goal:** To acquire the theoretical foundations of the main geological and geophysical techniques for monitoring active volcanoes. To recognize the main indicators of the reactivation of a volcanic system using different techniques. To integrate the analysis of different techniques in order to be able to interpret real-world cases of volcanic eruptions worldwide.	Review of the various monitoring techniques associated with volcanic activity, such as seismicity, deformation, gravimetric anomalies, and gas sampling. Emphasis will also be placed on geological mapping and the identification of past eruptions as the key to understanding the future behavior of a volcano. Review of case studies with special emphasis on the relevance of the different methods, the importance of integrating different sources of information and their relationship to decision-making in the face of volcanic crises Practical activities in which the student must discriminate the use of information, evaluate the situation presented and make decisions regarding the imminence or not of a volcanic eruption.	Prof. Angelo Castruccio
	Class 8: Wednesday, September 2, 2026 15:00 to 18:00 hrs	3 hours.			Expert SERNAGEOMIN
	Class 9: Friday, September 4, 2026 10:00 to - 13:00 hrs.	3 hours.			Japanese expert
Module 4: Case study in the Caribbean, Center and South America and Japan	Class 10: Monday, September 7, 2026 15:00 to 18:00 hrs.	3 hours	**Goal:** Integrate the knowledge acquired in previous units to analyze past eruptions in the Latin American and Caribbean regions. By the end of this unit, the student will be able to understand and analyze the interrelationship between the type of eruption, the surrounding environment and population, and the resulting effects of the eruptions.	Presentation and evaluation of different examples of the volcanological history of Latin America and the Caribbean. The eruptions of Santa María, 1902, Mount Pelee, 1902, Soufriere St Vincent, 1902, 1979 and 2021, Nevado del Ruiz, 1985, Soufriere Hills, 1995-2010, Paricutín, Chichón, 1943-1952, 1982, Cordón Caulle, 2011 and Calbuco, among 2015, others, will be analyzed. The discussion will cover the chronology of eruptive events, precursor signs, decision-making and crisis management, human losses, and infrastructure. and	Prof. Angelo Castruccio

	Class 11: Wednesday, September 9, 2026 15:00 to 18:00 hrs.3	3 hours	**Goal:** To integrate and apply the knowledge acquired during the course by formulating an action plan or applied project aimed at solving a specific problem in the participant's home institution. Upon completion of this unit, the student will be able to connect the content of volcanology, hazard management, and monitoring with real needs in their institutional context, projecting a tangible impact on volcanic risk reduction, capacity building, and/or the development of public policies in their country.	Oral presentation of the action plans or applied projects developed individually by each participant. Each presentation must identify the institutional problem addressed, the project objectives, the proposed methodology, and the expected results and impacts on the institution, communities, and/or public policies of the country of origin. A feedback session will be held among instructors and peers, fostering the exchange of experiences among participants from different countries in the region. The session will conclude with a collective reflection on the course's learning outcomes and opportunities for inter-institutional cooperation.	Prof. Angelo Castruccio

XIII. CONTACTS

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[3] The date and time of the virtual closing ceremony will be confirmed soon.