

# Flexible and Innovative Learning Pathways in the Context of Land Administration in Colombia: Microcredentials and Macrocredentials

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**Key words:** Training Strategy; Lifelong Learning; Educational Innovation; Virtuality; Microcredentials and Macrocredentials

## SUMMARY

The modernization of the Land Administration System (LAS) in Colombia has evolved into an integral ecosystem where stakeholders from various sectors nationwide interact freely, due to the interdisciplinary nature of Colombia's territorial approach. In 2021, with the support of the Swiss cooperation, Colombia initiated the national training strategy to build on the skills of the human capital implementing the LAS public policy and the multipurpose cadaster, both approved in 2016.

The gradual national educational strategy in the 2020-2024 LAS aims to create new value in the programs in alignment with the national ecosystem, educational innovation, and student retention and success. Likewise, globalization and the labor dynamics derived from the modernization and evolution of productive sectors such as the LAS have forced universities to make their academic programs portfolio more flexible, promoting lifelong learning through innovative curriculum structures that align with technological mediation as a differentiating factor.

Taking advantage of the macro and microcredentials initiative at Los Andes University and its launch in 2021, the SwissTierras Colombia project, the Colombian Association of Cadastral and Geodetic Engineers (ACICG, as per its acronym in Spanish), Eninco S.A., and the University are working on an innovative academic initiative in terms of content, flexibility, and curricular structure that can be integrated into the graduate programs offered at the Interdisciplinary Center for Development Studies (CIDER, as per its acronym in Spanish). The joint work between the partners translates into a 100-hour continuing education course with two different tracks: one with a managerial focus that can be validated for academic credits and count towards formal graduate programs offered by CIDER, and another with a technical focus, which works towards a professional certification.

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In this context, it has become clear that the labor market created by the implementation of public policies related to Land Administration in Colombia now demands new labor qualifications in the field of technical, technological, and professional performance, which are being defined together with the National Qualifications Framework (NQF) stakeholders. However, this is a long-term effort that leverages curricular flexibility exercises in formal education, such as the modularization of curricula into certified skills through macro and microcredentials.

This article presents the results, opportunities, and challenges in educational innovation, not only in terms of integrating aspects relevant to implementing the peace agreements (cadaster, land, and territorial planning), but also related to progress in presenting a specific experience involving academic stakeholders, non-governmental organizations, international cooperation entities, and the private sector, in order to contribute to the implementation and improvement of LAS in pursuit of stable and lasting peace in Colombia.

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