



ACE PROJECT OVERVIEW

ACCELERATING CLIMATE EDUCATION (ACE) IN CANADA'S PROFESSIONAL DEGREE PROGRAMS

BACKGROUND

In April 2024, the Waterloo Climate Institute was awarded a grant from Natural Resources Canada (NRCan)'s Climate Change Adaptation Program to support the accelerated integration of climate change adaptation competencies into professional degree programs in accounting, architecture, planning and engineering, and to collaborate with other universities and colleges across Canada to advance this work.

The funding program targets projects that can help to fill capacity and knowledge gaps for climate change adaptation across Canada, in line with the [National Climate Change Adaptation Strategy](#).

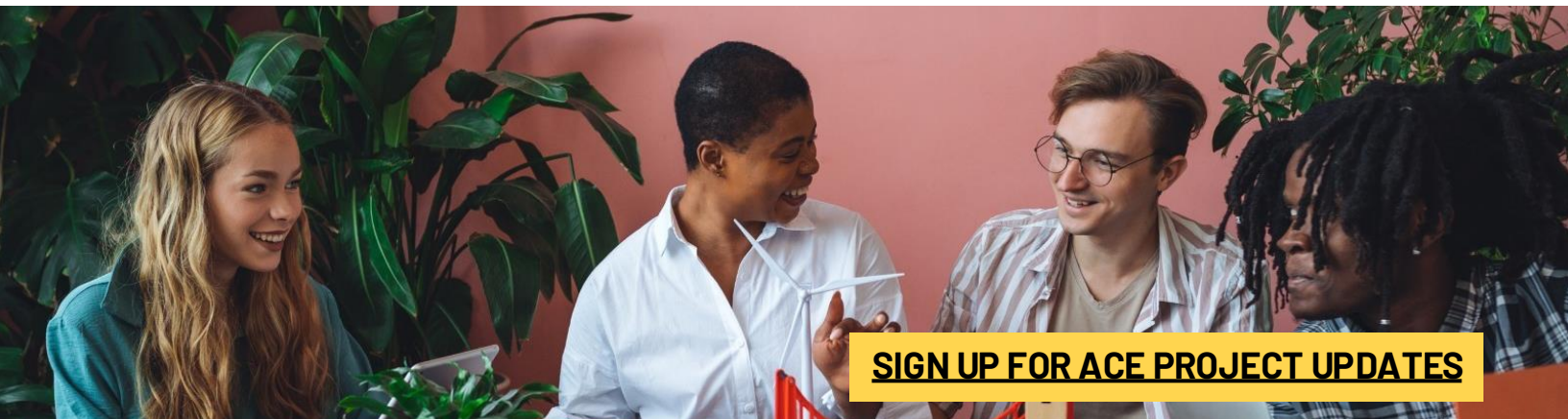
As part of the ACE project, UWaterloo is working on the integration of climate change adaptation knowledge and skills into our professional degree programs, at the same time ensuring that the new curriculum materials and courses are considered through equity and decolonizing lenses and build on broader work in climate and sustainability education. The project creates opportunities for dialogue, networking and collaboration with other higher education institutions across Canada to support and share efforts and to engage with professional accreditation bodies to support broader integration of climate adaptation competencies into these professions.

The three-year project will wrap up in December 2026.

PROJECT OBJECTIVES

The purpose of this project is ***to accelerate the integration of climate change adaptation knowledge and skills into professional degree programs in Canada, including Engineering, Accounting, Architecture and Planning***. The project focuses on integrating climate change in the curriculum through three inter-related objectives:

- 1. Needs Assessment:** Undertake a national study of the current status of climate education in the target professional degree programs across Canada to better understand supports needed by institutions.
- 2. Curriculum Revisions:** Design and integrate new curriculum into UWaterloo professional programs, including experiential activities that support cross-professional learning, and in alignment with professional associations' evolving competency development.
- 3. Communities of Practice:** Establish and/or support national initiatives to build capacity and share experiences and resources to accelerate the integration of climate adaptation into the curriculum of professional degree programs



SIGN UP FOR ACE PROJECT UPDATES

A COLLABORATIVE APPROACH

The project is being implemented by the Waterloo Climate Institute and five Departments offering professional degree programs at the University of Waterloo: Civil and Environmental Engineering Department, Systems Design Engineering Department, the School of Accounting and Finance, the School of Architecture, and the School of Planning. Other Waterloo partners include the Centre for Teaching Excellence and the Sustainability Office's Sustainability Integration in Curriculum program. The project involves engagement with other universities and colleges across Canada and has representatives from national professional bodies on the advisory committee, including Engineers Canada, the Canadian Institute of Planners (CIP), Canadian Architecture Certification Board (CACB), Chartered Professional Accountants of Canada (CPA-Canada) and the Canadian Society of Landscape Architects.

PROJECT ACTIVITIES AND OUTPUTS

The key project activities are organized under three interrelated components:

COMPONENT A – NATIONAL NEEDS ASSESSMENT

In year 1 of the project, we undertook a survey of the status of climate change education in Canadian accounting, architecture, engineering and planning programs and compiled a National Report which is available in both English and French on the [Climate Institute website](#). The findings provide an overview of current trends and approaches to integrating climate mitigation and adaptation into professional degree programs, and highlights barriers, enabling factors and supports needed across all target disciplines.

COMPONENT B – CURRICULUM REVISIONS AT UWaterloo

All of the participating UWaterloo departments are working on integrating climate adaptation into their curriculum. Each has a curriculum working group and in year 1, with the help of student research assistants, faculty members have undertaken audits of existing climate content in courses and mapped out opportunities to introduce new courses and/or enhance existing courses with climate adaptation topics, case studies and extra-curricular events. Efforts in years 2 and 3 of the project will focus on implementing and documenting the curriculum changes. We are also working together on experiential activities to support cross-professional learning and collaboration among faculty members and students from the participating departments as well as other disciplines.



COMPONENT C – SUPPORTING COMMUNITIES OF PRACTICE

This project aims to establish a national interdisciplinary community of practice for climate change adaptation education that builds on existing initiatives for sustainability and climate education in post-secondary institutions, and enhances dialogue and advance climate change education within each of the target disciplines. Activities include:

- An Annual Forum for dialogue and exchange among faculty members and other stakeholders from across Canada (the first one took place on April 8, 2025)
- Supporting and participating in meetings, discussion and resource sharing among existing networks of professional schools
- Facilitating workshops and discussions on climate adaptation education at professional and academic conferences
- Compiling and sharing findings, best practices, and tools to support the integration of new climate adaptation competencies into programs across Canada via webinars and the Climate Institute website.

FOR MORE INFORMATION OR TO GET INVOLVED PLEASE CONTACT DR. MICHELE MARTIN AT THE WATERLOO CLIMATE INSTITUTE (MICHELEP.MARTIN@UWATERLOO) OR VISIT THE [PROJECT WEBSITE](#).



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