



PROJECT OVERVIEW

ACCELERATING CLIMATE CHANGE EDUCATION IN PROFESSIONAL DEGREE PROGRAMS

BACKGROUND

The Waterloo Climate Institute has been awarded a grant from Natural Resources Canada (NRCan)'s Climate Change Adaptation Program to support the integration of climate change adaptation (CCA) competencies into our professional degree programs in accounting, architecture, planning and engineering, and collaborate with other universities and colleges across Canada as they do the same.

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](#).

The project aims to help UWaterloo integrate CCA knowledge and skills into our professional degree programs, at the same time ensuring that the new curriculum materials and courses on CCA are considered through equity and decolonizing lenses. The project is also designed to create 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 CCA competencies into these professions.

The three-year project started in April 2024 and will wrap up in December 2026.

PROJECT OBJECTIVES

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

- 1. Needs Assessment:** Complete and compile a national, holistic review of CCA knowledge needs in professional degree programs in Canada.
- 2. Curriculum Revisions:** Design and integrate new CCA 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 / support national fora to support the integration of CCA curriculum into professional programs in other post-secondary institutions through capacity building and information sharing.



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, School of Accounting and Finance, 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 will also engage 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).

PROJECT ACTIVITIES AND OUTPUTS

The key project activities are organized under three interrelated components:

COMPONENT A - NEEDS ASSESSMENT FOR CCA IN CANADIAN PROFESSIONAL DEGREE PROGRAMS

We will complete and compile a national, holistic review of CCA education efforts and needs in professional degree programs in Canada (focusing on engineering, planning, accounting and architecture). Activities include:

- Develop methodology (a national online survey in the Fall of 2024)
- Undertake desktop scan and survey and compile findings
- Present findings at national forum in March 2025 and launch Community of Practice

COMPONENT B - CURRICULUM REVISIONS AT UWATERLOO

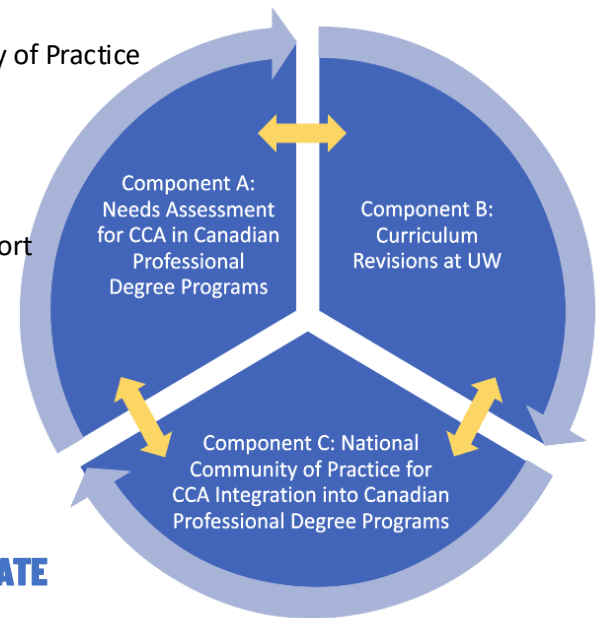
We are working on the design and integration of new CCA curriculum into UWaterloo professional programs, including experiential activities that support cross-professional learning, and in alignment with professional associations' evolving competency development. Activities include:

- Establish working groups in each department
- Assess the status of CCA content and pedagogy in our programs
- Undertake curriculum revisions in each program as needed
- Introduce new interdisciplinary CCA initiatives for faculty and students
- Share / report on UWaterloo achievements

COMPONENT C - NATIONAL COMMUNITIES OF PRACTICE TO ACCELERATE INTEGRATION OF CCE IN PROFESSIONAL DEGREE PROGRAMS

We will establish and/or support national fora to advance the integration of CCA curriculum into professional programs in other post-secondary institutions through capacity building and information sharing. Planned activities include:

- Annual forum for dialogue and exchange with stakeholders and faculty members from other post-secondary institutions (first one planned for March 2025)
- Meetings, discussion and resource sharing among networks of professional schools
- Presentations and workshops on CCA education at professional and academic conferences
- Host a national in person forum on CCA in professional degree programs in year 3
- Compile and share findings, best practices, and tools to support the integration of new CCA competencies into programs across Canada



For more information please contact Dr. Michele Martin at the Waterloo Climate Institute (michelep.martin@uwaterloo) or visit the Climate Institute [website](#).



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