MASTER OF CLIMATE CHANGE

CANADA’S FIRST MASTER OF CLIMATE CHANGE

Global climate change is considered by many high-level decision makers to be one of the most pressing challenges facing humankind. To meet this challenge, an increased number of educated and highly skilled employees with climate change knowledge and experience are needed.

The Master of Climate Change (MCC) program was the first of its kind in North America. Established in 2013, it is a specialized, course-based (non-thesis) program at the University of Waterloo in Ontario, Canada.

“Climate Change is upon us and education is the most effective tool we have to mitigate and adapt to it. The University of Waterloo, as it did in the high-tech revolution, is leading the way with an innovative program that will equip Canada to face our greatest challenge.”

— JOHN BENNETT
Former Executive Director, Sierra Club Canada

PROGRAM STRUCTURE AND COURSES

The program typically runs for a period of three terms (12 months) of full-time studies.

<table>
<thead>
<tr>
<th>TERM ONE (FALL)</th>
<th>TERM TWO (WINTER)</th>
<th>TERM THREE (SPRING)</th>
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<tbody>
<tr>
<td>» Climate Change: Physical Science Basis</td>
<td>» Three climate change electives</td>
<td>» Either a major research paper OR a four-month professional internship*</td>
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<tr>
<td>» Climate Change: Vulnerability and Adaptation</td>
<td>» One open elective</td>
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<tr>
<td>» Climate Change: Mitigation</td>
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*It is the student’s responsibility, with advice from the MCC Program Director and staff, to seek out and confirm an organization with which they will undertake an internship.

PROFESSIONAL INTERNSHIP

This milestone provides students with the opportunity to gain practical and professional development skills. Students work in a range of sectors and professions.

Examples of past MCC internship employers include:

» ZZT Group
» Parks Canada
» Golder Associates
» Health Canada
» Reep Green Solutions
» Natural Resources Canada
» Canadian Council on Ecological Areas
» Indigenous and Northern Affairs Canada (INAC)
» Environment and Climate Change Canada (ECCC)
» Toronto and Region Conservation Authority (TRCA)
» Ministry of Environment and Climate Change (MECC)
» United Nations Framework Convention on Climate Change (UNFCCC)
» Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR)

Government of Canada

Top employer of MCC graduates

20%

International students from more than 10 nations

UNIVERSITY OF WATERLOO
WORLD CLASS RESEARCH EXPERTISE AND LEADERSHIP

The Master of Climate Change provides the opportunity to work with professors that have contributed to the Intergovernmental Panel on Climate Change (IPCC) assessments and collaborated with a number of United Nations agencies and a wide range of governmental, non-governmental and businesses on climate change research and decision-making.

"Addressing the challenges presented by climate change requires an integrated and multifaceted skillset not typically cultivated by post-secondary programs. By founding the educational basis of the Master’s of Climate Change program on the Working Groups of the Intergovernmental Panel on Climate Change, the University of Waterloo has aligned knowledge development with the priorities established by the international community of experts. As the public, private and non-profit sectors work to develop solutions to the emerging problems facing Canada, the MCC provides graduates with a robust capacity for leadership in the climate field."

MCC STUDENTS AT COP

Many MCC students have been selected to be a part of the University of Waterloo’s delegation to the 19th, 20th, 21st, 22nd, and 23rd Conference of the Parties to the United Nations Framework Convention on Climate Change. At these climate change negotiations students gain experiential learning and contribute to the global climate change dialogue.

SHAPING OUR SUSTAINABLE FUTURE

Building on nearly four decades of academic excellence, the University of Waterloo’s Faculty of Environment creates knowledge, nurtures learning, and promotes action to shape our sustainable future in Canada and internationally. As Waterloo’s fastest growing faculty, it is focused on developing and implementing the smart solutions needed to address the most critical issues of environment and sustainability that threaten the health and prosperity of our world today.

CREATING CLIMATE CHANGE PROFESSIONALS

The MCC program prepares the next generation of climate change professionals. Entering their internship, MCC students are prepared with:

- Specialized knowledge of the latest research findings and emerging technologies,
- Training in diverse research methods and data analysis applicable to the development of climate change solutions,
- Advanced knowledge of recent climate change policy-making and regulatory developments at multiple levels,
- Knowledge of best practices and innovative solutions,
- Advanced understanding of the social, cultural and political dimensions of developing effective climate change solutions,
- Experience networking with MCC alumni and other practicing professionals across Canada and internationally,
- Skills in the development and delivery of effective communications,
- Well-developed interpersonal skills and cross-disciplinary program experience essential to work effectively in diverse professional teams,
- Knowledge of professional ethics specific to climate change fields and sound decision-making skills.

https://uwaterloo.ca/geography-environmental-management/graduate/master-climate-change