School of the Environment
UNIVERSITY OF TORONTO

GRADUATE PROGRAMS

- MASTER OF ENVIRONMENT & SUSTAINABILITY (MES)
- COLLABORATIVE SPECIALIZATIONS IN ENVIRONMENTAL STUDIES AND ENVIRONMENT & HEALTH

WHERE KNOWLEDGE MEETS ACTION

GRADUATE PROGRAMS

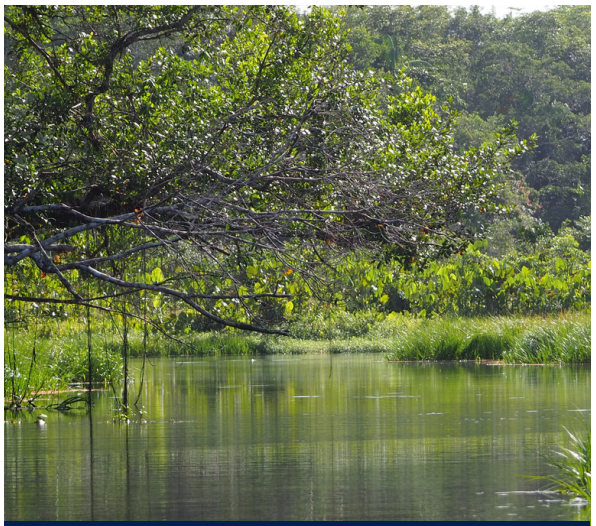
Bringing together multiple perspectives on today's pressing environmental challenges, The School of the Environment is a hub for researchers and students from many different disciplines spanning the social sciences, natural sciences, and humanities. Our faculty and instructors are a diverse community collaborating across campuses and beyond. No other university in Canada can offer students the breadth and depth of environmental and sustainability related scholarship found at the University of Toronto.

The School of the Environment offers the newly established Master of Environment & Sustainability program, a 12-month research-stream degree that provides a transdisciplinary perspective on environmental issues.

Students enrolled in a graduate degree elsewhere at the University of Toronto can partake in our Environmental Studies or our Environment and Health collaborative specializations, allowing them the opportunity to specialize and explore an interdisciplinary area that complements their existing program.

Focused

Transformative



Fulfilling

THE MES

Master of Environment & Sustainability

The MES is an intensive, 12-month research-stream program that responds to the growing need of society to understand and develop solutions to the environmental and human well-being challenges facing us in the 21st century. Upon graduation, MES graduates will have acquired a transdisciplinary perspective on environmental issues, learned to use methodologies and tools relevant to environmental protection and sustainability solutions, and will be well prepared for a variety of careers in the private, not-for profit, and public sectors, or for further studies at the doctoral level.

- Build transdisciplinary connections across the sciences, social sciences, and humanities to inform policy.
- Join the first research-based environmental master's program at the University of Toronto.
- Participate in experiential learning components.
- Belong to a small, intimate cohort-based program with the opportunity to work closely with faculty.

https://www.environment.utoronto.ca/graduate/mes

SUPERVISION

Students are assigned a supervisor upon admission. The hands-on supervision of students guarantees the quality of student learning overall. By working closely with their individual thesis advisor and advisory committees on an extended project, students can anticipate a strong and effective learning environment.

To encourage transdisciplinary perspectives, each MES student will have an advisory committee comprised of a primary supervisor and two other faculty members from two disciplines or academic units.

- Applicants are asked to secure a supervisor prior to applying. Check our faculty page on the website for a list of MES supervisors.

MES CONCENTRATIONS

Select one of the four concentrations to focus your degree.

ADAPTATION AND RESILIENCE

How will the world cope with the impacts of climate change? Adaptation focuses on how natural and human systems can prepare for change, to minimize harmful impacts. Resilience describes the ability of communities and ecosystems to cope with change and evolve in ways that improve their future sustainability. Together they determine how humanity will anticipate and respond to environmental crises.

GLOBAL CHANGE SCIENCE

Understanding global environmental change requires an examination of how human activity interacts with the Earth's atmosphere, oceans and biosphere, and the ways in which climate change, biodiversity loss, and persistent pollutants disrupt these systems. This concentration will offer a transdisciplinary perspective on the scientific study of these processes of change.

SOCIAL SUSTAINABILITY

Cultural assumptions and values shape the human relationship to nature, so it is important to draw on different worldviews – particularly indigenous perspectives – as we seek a just transition to a sustainable society. This concentration addresses issues of equity, diversity, social cohesion, quality of life, well-being, democracy, and governance within the concept of sustainability.

THE SUSTAINABILITY TRANSITION

The transition to sustainability is a social revolution as profound as the European transition from feudalism to capitalism. To create a low-carbon economy will require systemic change in energy production, resource management, human settlement, trade, digital technologies, and human governance. This concentration will examine the scientific, political, and historical implications of this transition.

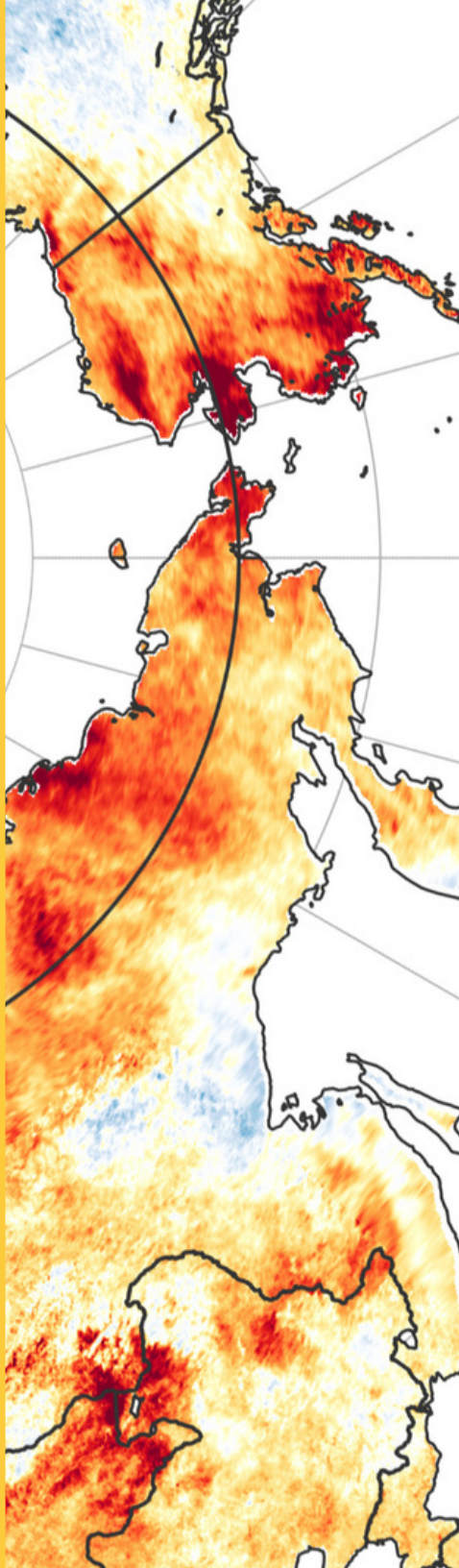


Image Source: NASA

MES COURSES

MES students complete 6 lecture-style courses (3.0 credits), 3 of which are required and 3 electives. In their final session, students write their thesis (1.0 credit).

ENV1103: CAMPUS AS A LIVING LAB (REQUIRED)

Our Living Laboratory approach explores new ideas for sustainable buildings, food systems, transportation, energy, and human health. Students engage with the U of T community on innovative sustainability projects while developing the leadership skills needed to apply these ideas beyond the campus after they graduate.

ENV1197 & ENV1198: RESEARCH IN ENVIRONMENT AND SUSTAINABILITY I & II (REQUIRED)

These required courses will prepare students for their thesis by allowing them to:

- Identify and develop thesis topic
- Draft a research proposal
- Prepare for data collection/ fieldwork
- Interact with faculty members

ELECTIVES (1.5 CREDITS)

MES students complete 3 electives towards their concentration from an array of graduate units, such as public health, forestry, geography and planning, chemistry, physics, political science, anthropology, social justice education, and engineering. Taking diverse electives allows students to have a transdisciplinary approach to their thesis topic and degree.

ENV1199: THESIS (REQUIRED)

During the summer term, students write a 15,000-word thesis (1.0 FCE), working with their supervisor and two committee members. At the end of the program, students will present their thesis research to faculty and other students at the annual MES Research Showcase.

https://www.environment.utoronto.ca/graduate/mes/mes-program-requirements

MES PROJECT SUPERVISORS

Below is a list of research topics/projects our faculty are recruiting students for for the Fall 2023 intake. Further information can be found on the School of the Environment's Faculty website page.

PROF. CHRISTIAN ABIZAID • JOINT WITH THE DEPARTMENT OF GEOGRAPHY & PLANNING

Conservation, livelihoods, food security, tropical forests, COVID-19 & environment.

PROF. SIMON APPOLLONI • SCHOOL OF THE ENVIRONMENT

Social and environmental ethics, environmental epistemologies, ecoanxiety and pedagogies of hope, liberation philosophies, worldviews and beliefs, religion and environment.

PROF. MICHAEL CLASSENS • SCHOOL OF THE ENVIRONMENT

Food systems and sustainably-focused work.

PROF. STEVE EASTERBROOK • DEPARTMENT OF COMPUTER SCIENCE

Climate informatics and modelling, earth system models, software-intensive systems.

MES PROJECT SUPERVISORS

PROF. MEREDITH FRANKLIN • JOINT WITH THE DEPARTMENT OF STATISTICAL SCIENCES

Analytical methods for using remote sensing data to characterize air quality and climate impacts from natural and anthropogenic sources.

PROF. J. ALSTAN JAKUBIEC • JOINT WITH DANIELS FACULTY OF ARCHITECTURE, LANDSCAPE, & DESIGN

Environmental sustainability at building or urban scales, simulation.

PROF. TERESA KRAMARZ • SCHOOL OF THE ENVIRONMENT

Lithium, mining, and energy transitions.

PROF. VIANEY LEOS BARAJAS • JOINT WITH THE DEPARTMENT OF STATISTICAL SCIENCES

Bayesian methods for analysis of shark detection data from acoustic receivers.

MES PROJECT SUPERVISORS

PROF. HANNA E. MORRIS • SCHOOL OF THE ENVIRONMENT

Climate communication, climate activism and transnational movement-building, imagining alternative futures for a “just transition", authoritarian politics and the climate crisis, climate art and visual culture.

PROF. HUI PENG• JOINT WITH THE DEPARTMENT OF CHEMISTRY

Toxicology and chemistry of chemical contaminants.

PROF. JOHN ROBINSON • JOINT WITH THE MUNK SCHOOL OF GLOBAL AFFAIRS & PUBLIC POLICY

Urban Climate Action Project

PROF. ROBERT SODEN • JOINT WITH THE DEPARTMENT OF COMPUTER SCIENCE

Climate and disaster models/data.

https://www.environment.utoronto.ca/graduate/mes/mes-supervisors

MES PROJECT SUPERVISORS

PROF. NICOLE SPIEGELAAR • JOINT WITH TRINITY COLLEGE

Environmental psychology, phenology, crop-pollinator interactions, wild edible and medicinal harvesting.

PROF. CLARE WISEMAN • SCHOOL OF THE ENVIRONMENT

Non-exhaust emissions from traffic and implications for urban health.

PROF. DEBRA WUNCH • JOINT WITH THE DEPARTMENT OF PHYSICS

Analyzing air pollution and greenhouse gas measurements.

PROF. TANHUM YOREH • SCHOOL OF THE ENVIRONMENT

Faith-based environmentalism, faith-based environmental ethics, religio-legal approaches to environmental protection.

https://www.environment.utoronto.ca/graduate/mes/mes-supervisors

MES APPLICATION PROCESS

ADMISSION REQUIREMENTS

- The deadline to apply is February 10, 2023
- The minimum admission requirement is a HBSc or HBA with at least a minor in environment, sustainability or a closely related field, or commensurate experience
- Minimum B+ average in each of the last two years of one's undergraduate degree

APPLICANTS SUBMIT:

- A letter of intent and optional diversity statement
- Transcripts from each institution attended
- Resume/CV
- Two letters of recommendation
- Proof of English Language Proficiency (if necessary)
- Application fee ($125.00)

https://admissions.sgs.utoronto.ca/apply/

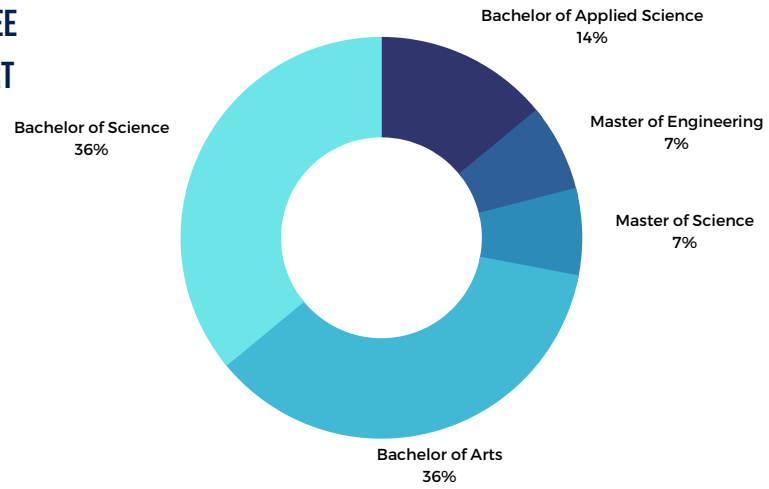
MES TUITION AND FUNDING

The MES is an unfunded program with tuition fees for 2022-23 being set at $6,210 for domestic students, and $27,520 for international students. The School of the Environment assists students with their tuition through entrance scholarships, Research Assistant funding and the opportunity to apply for Teaching Assistant positions and awards.

APPLY FOR GOVERNMENT AWARDS

- Canadian Graduate Scholarships Program — Masters: aims to help develop the research skills and assist in the training of highly qualified personnel by supporting students who are early in their graduate studies. Valued at $17,500 for 12 months. Domestic students can apply by December 1st.
- Ontario Graduate Scholarship Program: recognizes academic excellence in graduate studies in all disciplines of academic study. Valued at $5,000 per session for 2 or 3 consecutive sessions. International/domestic students can apply by April/May.

INCOMING DEGREE 2022-23 COHORT



MES STUDENTS

Lilly

Lilly is a recent graduate of the Sustainable Development program at the University of Edinburgh where she focused on the theoretical underpinnings of intersectional environmentalism. She is interested in environmental justice, ecofeminism, and the relationship between grassroots environmental activism and policy implementation. Lilly is looking forward to continuing her studies at U of T and is honoured to be part of the inaugural class of the MES program.

Zeina

Zeina comes from an Environmental Science & Diaspora and Transnational Studies background. Her research interests are centred around diasporic & marginalized communities, social justice & equity, social and cultural factors of sustainable practices, and the livelihoods and environment of non-Western and Western countries and nations. Within the MES program, Zeina is highly interested in the emphasis of interdisciplinary learning conducted through a transdisciplinary lens.

Matilda

Matilda recently completed a Health Studies Specialist and a Human Geography minor. Her research interests include urban food systems, urban political ecology, sustainability transitions, social sustainability, and food commons. She is excited to join the MES program as it brings together diverse, interdisciplinary understandings of sustainability and our environment and allows students to explore topics that exist at the boundaries of various disciplines but still concern the future of our environment and our interactions with it.

MES STUDENTS

Noshin

Noshin is a Disaster Science and Management student whose interests include remote sensing, air pollution, climate resilience, community risk assessment and public health. Noshin was interested in the MES's interdisciplinary approach to problem solving, which allows students to elect courses relevant to their research interests from various departments across campus. As Noshin hopes to complete a doctorate in the future.

Kristen

As a graduate coming from an Environment and Geography background, Kristen is interested researching the waste management practices within the City of Toronto. In particular, she hopes to examine the current waste management situation and determine whether alternative waste management practices can be adopted. Her interest in joining the MES program stems from the program curriculum.

Anuja

As a recent Political Science graduate, Anuja's interests include political ecology, worldviews and ecology, environmental policy and governance, and sustainable finance. The MES appealed to her due to its holistic vision, as well as the program's focus on social sustainability to address issues of democracy, governance and policy implementation. Anuja hopes to gain an interdisciplinary understanding of the environment and sustainability.

Sicheng

Coming from a Physical and Environmental Geography background, Sicheng is interested in carbon neutralization and environmental management. The program faculty and course curriculum were two aspects that attracted him to the MES. From the program, Sicheng hopes to gain professional knowledge on Environmental Science and sustainable development, as well as connect with alumni and professors in the environmental industry.

COLLABORATIVE SPECIALIZATIONS

Dan Weaver conducting research at the Polar Environmental Atmospheric Research Laboratory (PEARL).

The School of the Environment's Collaborative Specializations in **Environmental Studies** and **Environment and Health** offer students enrolled in a graduate degree program elsewhere at U of T the opportunity to specialize and explore an interdisciplinary area that complements their existing degree program. There are no additional fees to participate in a Collaborative Specialization.

Students enrolled in our Collaborative Specializations have access to the following opportunities:

- An array of courses with an environmental focus
- Experiential learning through internships and campus as a living lab courses
- Research experience through environment-focused theses/ research papers and the option to present at an annual event
- Numerous guest lectures, panels, symposiums, and events
- Belong to a network of students and faculty from across all three
  U of T campuses
- Awards and scholarships that are internal to School of the Environment graduate students
- A transcript notation and certificate upon completion/convocation highlighting the collaborative specialization in environment

https://www.environment.utoronto.ca/graduate/collaborative-specializations

COLLABORATIVE SPECIALIZATIONS

COLLABORATIVE SPECIALIZATION IN ENVIRONMENTAL STUDIES

The Collaborative Specialization in Environmental Studies provides students an opportunity to examine environmental-related issues from different disciplinary perspectives and gain insight into the importance of understanding and applying interdisciplinary concepts and approaches, methods and tools in environmental decision making.

Students admitted to a graduate degree program in a participating degree-granting unit can apply to the Collaborative Specialization in Environmental Studies to pursue coursework and research on topics related to the environment. The purpose is to complement the discipline-based learning and research focus of their home units by providing students an interdisciplinary forum to examine, discuss, and address environmental issues.

With participating students from as many as 20 different disciplines, the core course, ENV1001H Environmental Decision Making, gives students a unique opportunity to engage with faculty and peers coming from a range of academic backgrounds and perspectives.

Daniel Cowan, Master of Business Administration, Collaborative Specialization in Environmental Studies Class of 2020

After graduate school my aspiration was to contribute to movements challenging the status quo of how the business world has operated for so long. The classes I took in the specialization honed a deeper knowledge in a range of environmental topics and developed my critical thinking skills through an applied learning approach. This culminated in a confidence building independent study. Through this cross-discipline study, interviews with leadership at Canadian Banks and at Orsted, a fossil fuel company that transformed into a leading renewable company, contributed to my mixed-method analysis and recommendations for how resource and financial institutions could achieve ambitious environmental and social goals.

https://www.environment.utoronto.ca/graduate/collaborative-specializations/environmental-studies

COLLABORATIVE SPECIALIZATIONS

COLLABORATIVE SPECIALIZATION IN ENVIRONMENT AND HEALTH

The Collaborative Specialization in Environment and Health (CSEH) exposes students in the health sciences to broader environmental perspectives on health-related issues, while students in environmental studies and sciences have the opportunity to gain insight into the health implications of environmental quality. This specialization may also be of interest to students who are concerned with ethical, pedagogical, and policy approaches to understanding and addressing environment and health issues.

The study of environment and health recognizes that human health is fundamentally dependent on a healthy environment. With a focus on understanding the human health implications of chemical, biological, and physical hazards in our environment, it encompasses topics such as the health impacts of air and water quality, climate change, contaminated lands and urban design, and the need for interdisciplinary approaches to address them.

Emiko Newman, Master of Education in Social Justice Education, Collaborative Specialization in Environment and Health Class of 2022

One of the main factors influencing my decision to apply for U of T was the collaborative specializations offered by the School of the Environment. Although my home department is Social Justice Education at OISE, I have been able to complement those courses with environmental courses and focus on my passion: climate justice. My involvement with the Environment and Health specialization deepened my understanding of interdisciplinarity and allowed me to collaborate with students from across the university. It also brought me to the Graduate Environmental Students' Association (GESA); being an executive member for the past two years has contributed significantly to my overall graduate experience!

https://www.environment.utoronto.ca/graduate/collaborative-specializations/environment-health

GRADUATE SCHOLARSHIPS

SCHOOL OF THE ENVIRONMENT AWARDS FOR CURRENT MES AND COLLABORATIVE SPECIALIZATION STUDENTS

John R. Brown Award
Awarded to a qualified graduate student for the best-applied research project dedicated to the analysis and improvement of occupational and environmental health.

Sperrin Chant Award
Awarded to a student doing research in toxicology and who demonstrates academic excellence, strength of character, and financial need.

Marjorie Gillespie Bolton and Mabel Gillespie Norris Memorial Scholarship
Awarded to a graduate student with demonstrated financial need and whose academic focus is on sustainability, environmental justice, biodiversity, and/or conservation.

Eric David Baker Krause Graduate Fellowship
Awarded to a graduate student enrolled in a School of the Environment based on the applicant's record of financial need and academic excellence.

Arthur and Sonia Labatt Fellowships
Awarded to students who are exploring practical based solutions to environmental issues and/or examining marketplace for solutions to environmental issues.

George Burwash Langford Award
Preference given to a student who combines excellence in research in environmental studies/environment and health and contributes to the work of the School of the Environment.

Alexander B. Leman Memorial Award
Restricted to master's and doctoral students enrolled in a Collaborative Specialization at the School of the Environment and the Department of Geography's Program in Planning.

Beatrice and Arthur Minden Graduate Research Fellowship
Awarded to one or more PhD students enrolled one of the School of the Environment's Collaborative Specialization to provide them with support during the research stage of their dissertations.

Alan H. Weatherly Graduate Fellowship in Environmental Leadership
Awarded annually to one PhD student enrolled one of the School of the Environment's Collaborative Specializations, to encourage their research and academic achievement.

https://www.environment.utoronto.ca/graduate/graduate-student-resources/scholarships-awards

OTHER SCHOOL APPOINTED FACULTY

PROF. MIRIAM DIAMOND • JOINT WITH THE DEPARTMENT OF EARTH SCIENCES

·Human and ecosystem contaminant exposure · Contaminant sources and transport · Chemicals management ·

PROF. JESSICA F. GREEN • JOINT WITH THE DEPARTMENT OF POLITICAL SCIENCE

· Climate policy · Carbon markets · Global governance · NGOs ·

PROF. KAREN ING • SCHOOL OF THE ENVIRONMENT

· Environmental education · Ecosystem services and well-being ·

PROF. KATE NEVILLE • JOINT WITH THE DEPARTMENT OF POLITICAL SCIENCE

· Resource governance and energy transitions · Social movements and resistance · Fracking and biofuels ·

PROF. SCOTT PRUDHAM • JOINT WITH THE DEPARTMENT OF GEOGRAPHY & PLANNING

· Environmental justice · Political ecology · Capitalism-nature nexus ·

PROF. NJAL ROLLINSON • JOINT WITH THE DEPARTMENT OF ECOLOGY & EVOLUTIONARY BIOLOGY

· Animal life cycles · Ecology · Evolution ·

PROF. STEPHEN SCHARPER • JOINT WITH THE DEPARTMENT OF ANTHROPOLOGY

· Environmental ethics · Worldviews and ecology · Liberation theology ·

See the full list of our graduate facultly: https://www.environment.utoronto.ca/people/directories/all-faculty

FIND OUT MORE

ENVIRONMENT.UTORONTO.CA/GRADUATE

SCHOOL OF THE ENVIRONMENT

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