

# ENVIRONMENTAL SCIENCE (HBSc)

*Department of Geography, Geomatics and Environment*

**Environmental Science** is an interdisciplinary study of complex environmental problems involving the natural world and human impacts. Students can tailor the scientific focus of the program to their own interests, by choosing courses from Geographical and Earth Science perspectives; Biological/Ecological perspectives; and Physical/Chemical perspectives. Fieldwork, experiential learning, and research opportunities are important to the Environmental Science program. Courses on Social and Policy perspectives are also part of the program; no matter which pathway is followed, some courses on Social and Policy Perspectives are required. The premise is that those who will develop our scientific knowledge and technological capacities must also have a basic understanding of environmental management, policy, and the human-environment relationship. The Environment programs at UTM are all ECO Canada accredited. Graduates of major and specialist programs get a head start with an integrated environmental Professional-in-Training designation (Ept).

## MAKE THE MOST OF YOUR TIME AT UTM!

We want to help you maximize your university experience, so we've pulled together information and interesting suggestions to get you started, although there are many more! As you review the chart on the inside pages, note that many of the suggestions need not be restricted to the year they are mentioned. In fact, activities such as joining an academic society, engaging with faculty and seeking opportunities to gain experience should occur in each year of your study at UTM. Read through the chart and create your own plan using [My Program Plan](#) found at [www.utm.utoronto.ca/program-plans](http://www.utm.utoronto.ca/program-plans)

### Programs of Study (POSt)

- Specialist Program ERSPE1061 Environmental Science (Science)
- Major Program ERMAJ1061 Environmental Science (Science)
- Minor Program ERMIN1061 Environmental Science (Science)

### Check out...

Ever considered an internship? Apply for JEG400/401Y5 and gain hands-on experience with the City of Mississauga or the Region of Peel.

### What can I do with my degree?

The career you choose will depend on your experience and interests. Visit the Career Centre to explore your career options.

**Careers for Graduates:** Remediation specialist; Conservation officer; Forestry technician; Hazardous Waste planner; Outdoor Guide; Wildlife technician; Wetlands conservation supervisor; Conservation education coordinator; Environmental risk/impact assessor; Recycling coordinator; Forester; Environmental consultant; Activist; Lobbyist.

**Workplaces:** Waste Management; Private industry including utilities, construction, energy; Environmental planning; Government; Communications; Transportation; Scientific research groups; Architecture or surveying companies; Forestry; Mining.



# ENVIRONMENTAL SCIENCE

## MAJOR Program Plan

## HOW TO USE THIS PROGRAM PLAN

Read through each year. Investigate what appeals to you here and in any other Program Plans that apply to you.

Visit [www.utm.utoronto.ca/program-plans](http://www.utm.utoronto.ca/program-plans) to create your own plan using [My Program Plan](#). Update your plan yearly.



	1 <sup>ST</sup> YEAR	2 <sup>ND</sup> YEAR
PLAN YOUR ACADEMICS*	<p>Enrol in ENV100Y5. Attain 2.0 credits in Quantitative and Basic Scientific Foundation. View the <b>Academic Calendar</b> for course options.</p> <p>Choose a program of study (Subject POST) once you complete 4.0 credits. Use the <b>Degree Explorer</b> and the <b>Academic Calendar</b> to plan your degree.</p> <p>Develop foundational academic skills and strategies by enrolling in a <b>utmONE</b> course. Build community and gain academic support through <b>LAUNCH</b>. Join a <b>RGASC Peer Facilitated Study Group</b>.</p>	<p>Enrol in ENV201H5. Attain 0.5 credits from our Life Sciences Core, 1.0 credits from our Physical Geographical and Earth Sciences Core and 0.5 credits in Analytical &amp; Research Methods. View the <b>Academic Calendar</b>.</p> <p>Consider applying for <b>Research Opportunity Program (ROP)</b> courses ENV299Y and ENV399Y. Visit the EEU website for <b>ROP Course Prerequisites</b>. Attend the RGASC's <b>P.A.R.T.</b> to enhance your research skills.</p>
BUILD SKILLS	<p>Use the <b>Co-Curricular Record (CCR)</b>. Search for opportunities beyond the classroom, and keep track of your accomplishments.</p> <p>Attend the <b>Get Hired Fair</b> through the Career Centre (CC) to learn about on- and off-campus opportunities.</p>	<p>Use the <b>Career &amp; Co-Curricular Learning Network (CLNx)</b> to find postings for on- and off-campus work and volunteer opportunities.</p> <p>Work on-campus through the <b>Work-Study program</b>. View position descriptions on the CLNx.</p>
BUILD A NETWORK	<p>Networking simply means talking to people and developing relationships with them. Start by joining the <b>Student Association for Geography and Environment (SAGE)</b>.</p> <p>Visit the UTM Library <b>Reference Desk</b>.</p>	<p>Do you have a professor you really like or connect with? Ask them a question during office hours. Discuss an assignment. Go over lecture material. Don't be shy! Learn <b>Tips On How to Approach a Professor</b> available through the Experiential Education Unit (EEU).</p>
BUILD A GLOBAL MINDSET	<p><b>Attend events held by the International Education Centre (IEC)</b>, whether you are an international or domestic student. Explore your culture and other cultures through weekly/regular conversations, <b>Language Conversation Circles</b>, debates, and activities to enhance your global and intercultural mindset.</p>	<p>Engage in programs like the <b>Global and Intercultural Fluency Training Series (GIFTS)</b> or learn about and prepare for a future <b>UTM Abroad Experience</b> through the IEC to strengthen and enhance your intercultural skill set, and learn about other cultures while sharing your own!</p>
PLAN FOR YOUR FUTURE	<p>Attend the <b>Program Selection &amp; Career Options</b> workshop offered by the Office of the Registrar and the CC.</p> <p>Check out <b>Careers by Major</b> at the CC to see potential career options.</p>	<p>Explore careers through the CC's <b>Job Shadowing Program</b>. Ask the <b>Environment Programs Academic Counsellor</b> about <b>Professional Advancement for Geography and Environment Students (PAGES)</b>.</p> <p>Considering <b>further education</b>? Attend the CC's <b>Graduate &amp; Professional Schools Fair</b>. Talk to professors – they are potential mentors and references.</p>

\*Consult the Academic Calendar for greater detail on course requirements, program notes and degree requirements.

3 <sup>RD</sup> YEAR	4 <sup>TH</sup> OR FINAL YEAR
<p>Enrol in ENV330H5. Attain 0.5 credits in Field, Project-Based, Experiential, and Research Perspectives, 1.0 credits in Biogeochemical Perspectives and 0.5 credits in Social, Economic &amp; Policy Perspectives. View the <b>Academic Calendar</b>.</p> <p>Throughout your undergraduate degree:</p> <ul style="list-style-type: none"> <li>use the <b>Degree Explorer</b> to ensure you complete your degree and program requirements.</li> <li>see the <b>Office of the Registrar</b> and the <b>Environment Programs Academic Counsellor</b>.</li> </ul>	<p>What is <b>Experiential Education</b>? It means learn by doing! Gain experience designing and executing an independent senior thesis by enrolling in JEG417Y5 Honours Thesis. Speak to the <b>Environment Programs Academic Counsellor</b> about enrolling in a course with hands on experience such as ENV496H5 (Restoration Ecology II) and ENV497H5 (Environmental Research Project).</p> <p>Log on to ACORN and request graduation.</p>
<p>Gain practical experience through ENV332H5, a practicum in Environmental project management. Learn field techniques in Haliburton forest with GGR379H5. Speak to the <b>Environment Programs Academic Counsellor</b>.</p>	<p>Skills are transferrable to any job regardless of where you develop them. Consider a practical work-based experience through the internship course JEG400/401Y5. Speak to the <b>Environment Programs Academic Counsellor</b>.</p>
<p>Establish a professional presence on social media (e.g., LinkedIn).</p> <p>Attend department research seminars and participate in departmental <b>networking events</b> organized by SAGE.</p> <p>Thinking about life after UTM? Connect with a UTM alumnus through the CSE's <b>Alumni Mentorship Program!</b></p>	<p>Join a professional association. Check out the <b>Ontario Environment Network</b> or the <b>Canadian Association of Geographers</b>.</p> <p>Go to the <b>Annual Conference of the Environmental Studies Association of Canada</b>.</p>
<p><b>Earn credits overseas!</b> Apply to study for a summer, term or year at one of 140+ universities. The Geography, Geomatics and Environment department has identified partners which are most relevant to our students. Speak to the IEC for details about <b>Course Based Exchange</b>, funding and travel safety.</p>	<p>Learn about working abroad. Read up on worldwide employment trends and industry outlooks through <b>GoinGlobal</b>. Attend the <b>Go Global Expo</b>. See if you are eligible for <b>International Experience Canada</b>.</p>
<p>What's your next step after undergrad?</p> <p>Entering the workforce? Evaluate your career options through a <b>CC Career Counselling appointment</b>. Create a job search strategy — book a <b>CC Employment Strategies appointment</b>.</p> <p>Considering further education? Research application requirements, prepare for admission tests (LSAT, MCAT), and research funding options (OGS, NSERC)</p>	<p>Market your skills to employers. Get your <b>resume critiqued</b> at the CC. Attend the CC workshop <b>Now That I'm Graduating What's Next?</b></p> <p>Write a strong application for further education. Attend the CC's <b>Mastering the Personal Statement workshop</b>.</p> <p>Ready to transition from the classroom to the workplace? Check out the <b>Recent Graduate Opportunities Program</b>.</p>

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# ENVIRONMENTAL SCIENCE

## Skills developed in Environmental Science

To be competitive in the job market, it is essential that you can explain your skills to an employer. Visit the Career Centre to learn how to articulate and market the following skills:

**Research:** collect and preserve field organisms as well as utilize logical reasoning to interpret results/data derived from scientific experimentation.

**Technical:** use computer to manipulate and display data and comply with quality control procedures while conducting experiments.

**Quantitative:** apply statistical packages to data to test for significance.

**Communication:** support scientific findings by writing literature reviews of journal articles, and interact professionally with a multidisciplinary team of researchers, technicians, students and professors.

## Get involved

Check out the 100+ student organizations on campus. Here are a few:

- Student Association for Geography and Environment (SAGE)
- UTM Student Union (UTMSU)
- UTM Athletics Council (UTMAC)

For a listing of clubs on campus visit [www.utm.utoronto.ca/clubs](http://www.utm.utoronto.ca/clubs).

## Services that support you

- Accessibility Services (AS)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Equity, Diversity & Inclusion Office (EDIO)
- Experiential Education Unit (EEU)
- Health & Counselling Centre (HCC)
- Indigenous Centre (IC)
- International Education Centre (IEC)
- Office of the Registrar (OR)
- Recreation, Athletics and Wellness Centre (RAWC)
- Robert Gillespie Academic Skills Centre (RGASC)
- UTM Library, Hazel McCallion Academic Learning Centre (HMALC)

## Department of Geography, Geomatics and Environment

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## FUTURE STUDENTS

### Admission to UTM

All program areas require an Ontario Secondary School Diploma, or equivalent, with six Grade 12 U/M courses, or equivalent, including English. The admission average is calculated with English plus the next best five courses. The Grade 12 prerequisites for this program are Advanced Functions, Biology and Chemistry or Physics. The approximate average required for admission is mid- to high-70s. More information is available at [utm.utoronto.ca/viewbook](http://utm.utoronto.ca/viewbook).

**NOTE:** During the application process, applicants will select the Chemical & Physical Sciences admissions category, but will not officially be admitted to a formal program of study (Specialist, Major, and/or Minor) until after first year.

### Sneak Peek

Abundant opportunities are available for students to become involved in environmental practice, research and fieldwork (e.g., ENV299Y5 Research Opportunity Program, ENV332H5 Environmental Sustainability Practicum, and ENV497H5 Environmental Research Project). Students may also have the opportunity to complete a practical work placement course related to their specific area of interest (JEG400/401Y5 Environmental Geography Internship).

Our curriculum stresses the integrative nature of the study of the environment. Environment faculty members encourage students to become involved in critical thinking, cross-disciplinary collaboration, and the application of concepts to real-life problems.

### Student Recruitment & Admissions

Innovation Complex, Room 1270  
University of Toronto Mississauga  
3359 Mississauga Rd  
Mississauga ON Canada L5L 1C6

905-828-5400

[www.utm.utoronto.ca/future-students](http://www.utm.utoronto.ca/future-students)

