

THE TRENT SCHOOL OF THE ENVIRONMENT

Welcome

WE ARE THE UNIVERSITY OF CHOICE FOR FUTURE ENVIRONMENTAL LEADERS

Our prestigious School of the Environment has the reputation as a leader in Canada for good reason: we are one of the country's most sought-after locations for environmental research and innovation. Discover our unparalleled and guaranteed career and hands-on learning opportunities, world-class laboratories and second-to-none on-campus nature areas. Numerous and varied degree options are taught by renowned faculty, who are global and national leaders in climate change, water quality, renewable energy, biodiversity, and food security – just to name a few.

The philosophy

"Trent offers all of the opportunities of a large university – well-published scholars, world-class facilities and cutting-edge technology – but, with us, you also get smaller class sizes and one-on-one teaching and mentorship from our expert faculty, many of whom will get to know you on a first-name basis. And of course we offer what no other school can – our unique and beautiful campus where you can get hands-on experience collecting real data working in forests, wetlands and on the river."

Dr. Shaun Watmough, professor and director of Trent School of the Environment



THE TRENT ADVANTAGE

No other university offers you more ways to study the environment

What makes the Trent School of the Environment so exceptional? There's a long list, but let's start with the top five:

- 01 Respected credentials** – We are the first university in Canada to achieve accreditation from ECO Canada. With six ECO Canada accredited degrees, the TSE is widely recognized by the world's top environmental employers. Our accreditation can also give you an advantage landing that perfect summer job through wage-funded co-ops and employment opportunities (ask us how!). Degrees from the TSE are also respected world-wide as credentials for some of the most prestigious postgraduate and professional schools.
- 02 Expert faculty** – The TSE is home to globally-recognized experts tackling the world's most complex challenges including climate change and pollution, environmental policy, food security, the health of freshwater ecosystems, energy security, and urban planning. These respected profs – even prestigious Canada Research Chairs – will know you by name and interact with you one-on-one as you work together to make a positive impact on the health of our planet. You might even get involved in their research.
- 03 We are the school with the widest variety and depth of environmental programming in Canada** – The School's degree options are as distinctive as you are. Our 14 degree offerings, including nine B.Sc. programs, four B.A. programs and one combined B.E.S.S. program, cover a unique range of subjects such as Environmental Geoscience; Ecological Restoration; Sustainable Agriculture & Food Systems; Indigenous Environmental Studies, as well as a **new** degree in Climate Policy & Science. The TSE also boasts more than 140 courses across multiple disciplines in the arts and sciences. *Browse our programs on pages 4/5.*
- 04 Go state-of-the-art and back to nature** – Imagine studying and learning, hands-on, in one of the world's leading water quality research facilities, examining the effects of soil degradation in a state-of-the-art wind tunnel, conducting research on the rooftop garden, or studying the natural world in 12 on-campus nature areas – at Trent, you have access to it all. *Learn more on pages 6/7.*
- 05 Internships, placements and experiential learning** – The TSE proudly offers the highest number of experiential learning opportunities of any department at Trent. Apply your environmental knowledge to the real world through on-campus field and lab work, as well as local and international placements and internships. Our students work with the Ministry of Natural Resources & Forestry (right here on campus), Ontario Turtle Conservation Centre, and Fisheries and Oceans Canada. *Explore the opportunities pages 10/11.*

#1

UNDERGRADUATE UNIVERSITY IN ONTARIO

TOP 20

ENVIRONMENTAL SCIENCE PROGRAMS IN CANADA

10

CANADA RESEARCH CHAIRS

#1

IN CANADA FOR SCHOLARSHIPS & BURSARIES FOR 20 YEARS IN A ROW

WORLD-RENOWNED RESEARCH FACILITIES

Water Quality Centre; Wildlife DNA Lab; Forensics Crime Scene Facility to name a few

97%

OF TRENT GRADS EMPLOYED

within two years of graduating

TOP 3

GREENEST CAMPUSES IN CANADA

DEGREES OF *Excellence*

The School of the Environment offers a rich learning environment at every level of study. At the undergraduate level, we offer over a dozen degree programs and more than 140 environment-related courses across multiple disciplines in the arts and sciences. When mapping out a path to your future, you can choose from an existing program of study or design a one-of-a-kind degree around your interests and passions.

Bachelor of Environmental Science/ Studies (B.E.S.S.)

Offering students a holistic understanding of the environment, bringing together topics in science and the arts to solve key environmental issues.

Climate Science & Policy (B.Sc.)* NEW

Climate change is the greatest challenge of our time. Mitigating and preparing for this challenge requires scientific knowledge, strong communication skills and political awareness. This program takes a unique approach to the intersection of climate science and climate policy in an interdisciplinary environment.

Climate Change Science & Policy (Specialization) NEW

If you find yourself trading the car for public transit, reviewing a company's environmental initiatives or participating alongside millions of others in global climate marches, this specialization, which can be added to your Geography or Environmental & Resource Sciences/ Studies B.Sc. or B.A. degree, is for you.

Ecological Restoration (B.Sc.)

Graduate in four years with both a Fleming College diploma and Trent University degree, with the practical and theoretical knowledge needed to help restore and protect our natural environments for present and future generations.

Circumpolar Studies Diploma (Online)

Be a groundbreaker – study in the first fully-online Circumpolar Studies diploma offered at a Canadian university.

Environmental Chemistry (B.Sc.)

Learn to understand the big picture of diverse environments by examining its smallest components. Your studies in Environmental Chemistry will introduce you to contemporary approaches to quantifying contaminants, along with the sources of chemicals, their cycles and the impact they have on organisms and ecosystems in the environment.

Environmental Geoscience (B.Sc.)

Receive specialized training in environmental techniques used in geotechnical investigations, as you gain the academic requirements to work toward your Professional Geoscientist (P.Geo) accreditation.

Environmental & Resource Science/ Studies (B.Sc./B.A.)

Choose to complete a B.A. degree and explore topics in environmental law, global environmental policy and management to inform sustainable solutions. With the B.Sc. option, you'll obtain an advanced scientific understanding of the environment, diving into everything from environmental chemistry to restoration ecology.

Geography (B.A./B.Sc.)

From migration and urbanization, to the relationship between gender and space, Geography B.A. students focus their studies on human geography, particularly how people encounter and shape their environments. Geography B.Sc. students take a deeper look into the human and natural forces that shape the physical world, studying topics like hydrology, topography, earth materials and climate.

Sustainable Agriculture and Food Systems (B.A./B.Sc.)

Examine the pathways between farm and table and their implications for people, the economy, and the planet. This program is one-of-a-kind in Canada.

Small-Scale Farming (Specialization) NEW

Dig deeper into sustainable, regenerative farming practices through real-world learning experiences in farming, marketing, distribution, and food preparation. The Specialization provides students with a comprehensive background and hands-on experience in growing food and contributing to resilient regional food systems.



Indigenous Environmental Studies/ Science (B.A. / B.Sc.)

Study a unique mix of Indigenous knowledge and Western teachings, learning from Indigenous and non-Indigenous faculty, elders, guest speakers and other scholars in this first of its kind (anywhere in North America!) program.

Water Sciences (B.Sc.)

Learn about topics that are foundational to efforts to conserve our most precious resource: freshwater, which accounts for less than two per cent of the Earth's water supply. You'll gain a thorough

understanding of contemporary water challenges, acquiring the knowledge and skills necessary to respond to aquatic issues in Canada and around the world.

Unique Law Pathways: Trent/ Swansea Dual Degree (B.A. & LL.B.) Law & Environmental & Resource Studies OR Law & Geography

This one-of-a-kind dual degree program allows you to graduate with two degrees in just six years – a Bachelor of Arts from Trent and a law degree from Swansea University's renowned Hillary Rodham Clinton School of Law in the UK.

Your program, your way

Can't decide on a single program? Opt for a joint major instead. Not only can you combine majors from within many of our programs at the Trent School of the Environment, you can venture outside the School, too.

The possibilities are virtually endless, from pairing Environmental Science and Business or International Development Studies, to Geography and Computer Science. Let us work with you to find a joint major that best suits our needs and goals.

GO FURTHER WITH GRADUATE STUDIES

Ready to take the next step in your academic career? The School of Graduate Studies at Trent University is home to several renowned environmentally-themed graduate programs, including:

Bioenvironmental Monitoring & Assessment (M.Sc., M.BEMA and Graduate Diploma)

Jump-start your career and build professional experience in the environmental sector. Students can choose from three different degree options – a thesis-based M.Sc., or the online course-based Masters degree and Graduate Diploma options.

Environmental & Life Sciences M.Sc. & Ph.D.

Dive into your graduate degree and study alongside world-renowned researchers in state-of-the-art facilities. These prestigious programs offer students real-world experience working alongside government agencies, industry partners, and leading NGOs as they explore the environmental issues that will shape our future.

Get there sooner with our Accelerated Masters: TSE students can fast-track to a Masters in ENLS after completing your honours undergraduate degree.

Sustainability Studies M.A.

This first-of-its-kind program is renowned for developing leaders in the field who can actively advance research and practice in critical sustainability-based challenges, including environmental protection, resource conservation and positive social change.

trentu.ca/graduatestudies

WHERE NATURE AND STATE-OF-THE-ART FACILITIES MEET

Working side-by-side with top researchers within our cutting-edge laboratories or in the vast on-campus nature areas (as early as your undergrad!). At Trent, there are many fascinating places to get hands-on experience in research projects.

01 Water Quality Centre

Test the waters – literally – in this world-renowned centre: you'll have the opportunity to use state-of-the-art mass spectrometers in your undergrad and do your own experiments. The WQC is also a great place to make connections (truly linking theory and practice) with researchers from other universities and private companies accessing this space.



01

02 Environmental Wind Tunnel

Our students get "blown away" by opportunities to conduct research in this state-of-the-art facility, designed to simulate the atmospheric boundary layer both in clean air and with sediment transport.



02

03 Aurora Greenhouse

Grow your research experience in our on-campus greenhouse. In the greenhouse, temperature, humidity, air velocity, and light intensity are all tightly controlled, but the potential for you to gain career experience is practically limitless.



03

04 12 On-Campus Nature Areas

Lush forest, wetlands, drumlins, streams, open fields and creeks. With roughly 1,400 acres of land situated on the banks of the Otonabee River and more than 30 kilometres of nature trails, Trent's campus is not only picturesque but also offers a unique learning landscape for students to collect real data in these natural environments.



07



04



06



08



09



10

10 James McLean Oliver Ecological Centre

This waterfront field station located nearby in Bobcaygeon on Pigeon Lake is a popular research site for undergrad and graduate students studying various habitats on the property and in the surrounding area – including the northern saw-whet owl.



05

05 Ministry of Natural Resources & Forestry Labs

With offices and labs located right on-campus in the state-of-the-art DNA building, MNR researchers work with TSE students pursuing joint majors in Biology and Forensics on a variety of leading-edge, real-world environmental research projects.

06 Rooftop Gardens

With approximately 3500m² of green roof space on campus, the largest and most notable of Trent's rooftop gardens is on the Environmental Sciences Building. Trent built this green roof into the original plans for the building almost three decades ago.

07 Trent Farm

Dig deeper into sustainable, regenerative farming practices as you gain experience in growing a range of vegetables and field crops on the Trent Farm. Here you'll play an active role in preparing the land for farming by implementing good soil management and other regenerative agriculture practices, which will not only be beneficial to the farm but also the surrounding nature areas.

08 Trent Market Garden

Operated by the student-run Sustainable Agriculture and Food Systems Society, this garden provides produce to the University food provider (served in our dining halls!), on-campus pop-up markets and local farmers' market.

09 Trent Microenvironment Lab

The most comprehensive research facility of its kind among Canadian universities, this lab supports researchers in their quest to accurately predict the future impact of climate change, pollution and other negative pressures on biological, physical and chemical processes in the natural environment.

Stories



Digging Deeper into Regenerative Farming Practices

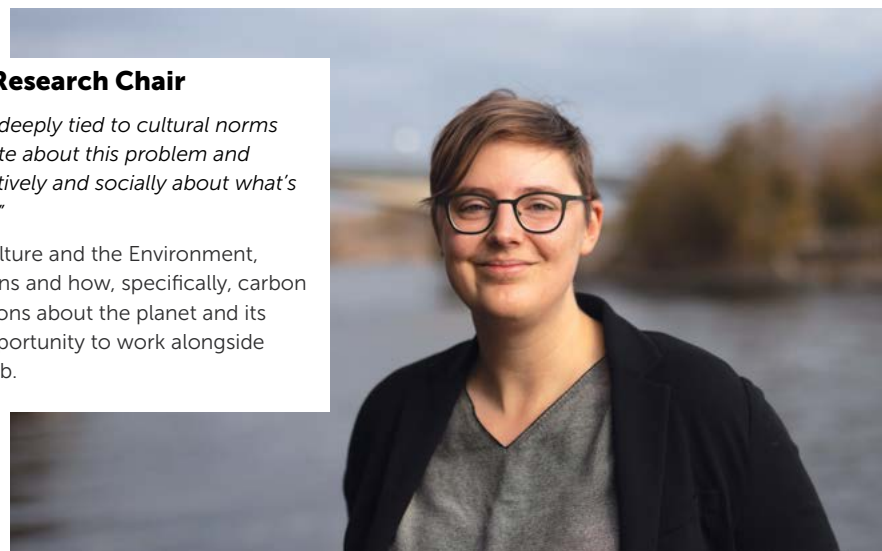
"Students will have the opportunity to get their hands dirty and work alongside expert faculty as we plan the operations and logistics of moving to and setting up the new Trent Farm."

Dr. Karen Thompson, assistant professor and coordinator of the Sustainable Agriculture and Food Systems program. The Trent Farm will be relocated and serve as a hub for students as they gain more than 240 hours' hands-on farming experience in this new specialization.

Study Climate Change with a Canada Research Chair

"Climate change isn't just a scientific issue, it's also deeply tied to cultural norms and the media by which we learn and communicate about this problem and each other. This means that we need to think creatively and socially about what's holding us back and what could move us forward."

As Trent's new Canada research chair in Media, Culture and the Environment, **Dr. Anne Pasek** is studying climate communications and how, specifically, carbon is represented in different contexts and conversations about the planet and its energy futures. Students, like you, will have the opportunity to work alongside Professor Pasek in her new low carbon research lab.



A Leading Climate for Research

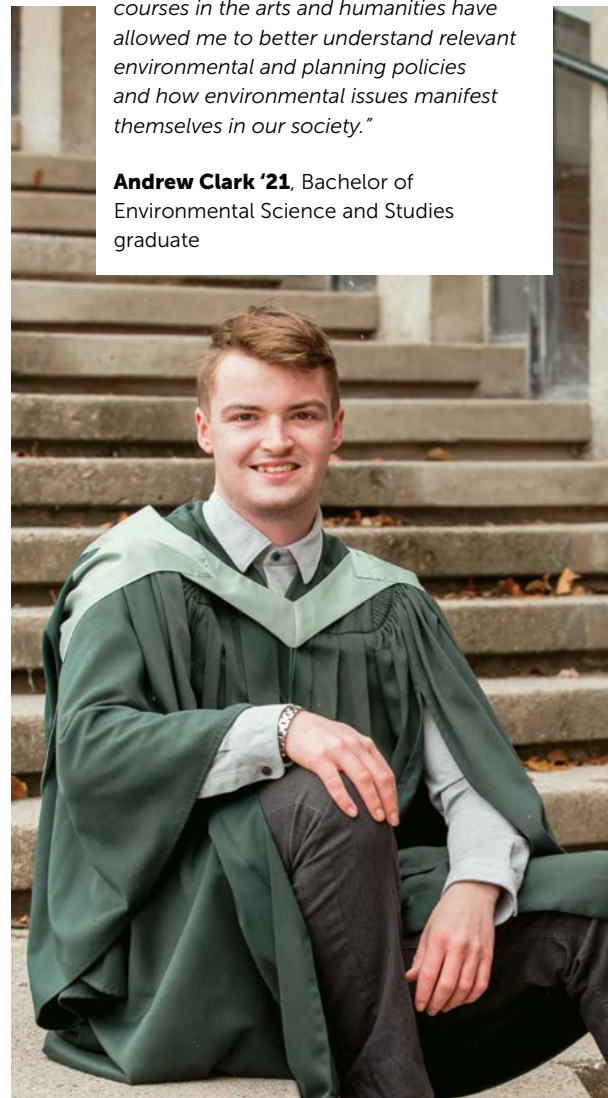
"My research is advancing efforts towards sustainable resource development, particularly in Canada's mining industry. This new research program at Trent will lead to exciting innovations in environmental geoscience, and outstanding learning experiences for students in this time of significant environmental and ecological change."

As the first-ever Canada research chair in Environmental Geoscience, **Dr. Ian Power** is making significant contribution to sustainable development in mineral resources and facilitating the transition to a low-carbon economy. Imagine what you can learn working directly with leading experts like Professor Power.

The Perfect Balance of Theory and Practice

"My science-based courses have given me experience with standard environmental sampling procedures, analytical techniques, and report writing. On the other hand, my courses in the arts and humanities have allowed me to better understand relevant environmental and planning policies and how environmental issues manifest themselves in our society."

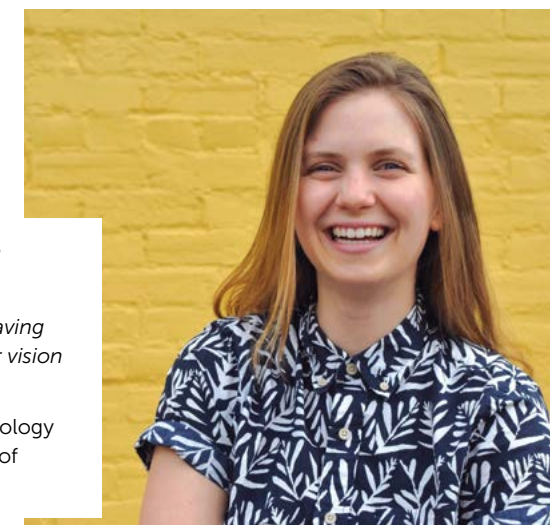
Andrew Clark '21, Bachelor of Environmental Science and Studies graduate



Winner of the Golden Globe in Science and Technology

"Trent is the ideal institution for my research because it values diversity and promotes research across borders. It offers a unique combination of three key ingredients fundamental to successful research programs – outstanding collegial environment, motivated students and world-class facilities. At Trent, we aspire to climb the ladder of success, but also make sure to leave the ladder down so others can follow."

Dr. Huy Dang, assistant professor in Trent's School of the Environment, is quickly gaining a reputation as one of the University's (and the world's) promising young researchers to watch with his groundbreaking research on rare earth metals. Students working with Professor Dang benefit from his collaborative international work and have the opportunity to participate in overseas research through long-term collaborations with universities in France.



Grad Harvests Water from Atmosphere to Help Communities in Africa

"I could never have known I would end up where I am. But that's the benefit of having mentors in your life – mentors like those I had at Trent – ones that have a bigger vision and can guide you towards things that are really good for you and your life."

Anastasia Kaschenko '12, a B.E.S.S. graduate, is the co-founder and chief technology officer of Majik Water (majikwater.co), a start-up currently creating new sources of affordable, clean drinking water for communities in Kenya and South Africa.

EXPERIENCE AT YOUR FINGERTIPS: ON CAMPUS, IN THE COMMUNITY, INTO THE WORLD

At Trent, you don't have to wait to graduate to start putting your environmental education to work. School of the Environment students have access to a range of on-campus and community-based career-enhancing experiences. Research projects are hands-on, experience-rich, and take full advantage of the local ecology and international study opportunities that offer a global perspective on all things environmental.



WORK FOR CREDIT: INTERNSHIPS & PLACEMENTS

Gaining real-world working experience while you study gives you the opportunity to envision your future career and can lead to the development of lasting connections in the workforce. Our ECO Canada-accredited degrees provide dynamic pathways for placements and internships for upper-year and post-graduate students. Here you'll gain program-related experience in a professional work environment for academic credit. Picture yourself working alongside industry leaders at Otonabee Region Conservation Authority, performing data entry and analysis to monitor trends in water quality in cold water streams, or gaining international insight by working with Nature Fiji (through Think Pacific), to learn about conservation in Fiji and producing materials to promote an upcoming shorebird count.

CONDUCT RESEARCH WITH FACULTY EXPERTS

As early as your first year, you can conduct hands-on research with leading professors and researchers. Our students have measured carbon dioxide emissions from peatlands in northern Canada, investigated how waste from mining operations can be used to capture and store carbon dioxide, monitored water quality from agricultural run-off, tested water samples at our Water Quality Centre and conducted research on microplastic pollution. What cutting-edge research will you undertake at Trent?

Did you know?

At Trent, every student is guaranteed to have meaningful and recorded career and experiential learning opportunities that will contribute to success as you enter the workforce or go in to graduate work.

97% OF TRENT GRADS EMPLOYED
within **two years** of graduating
CUDO 2020

HANDS-ON FIELD COURSES

Students in the TSE have numerous opportunities to enroll in a variety of hands-on field courses in your upper years of study. These courses, mostly available in the summer months, allow you to concentrate on an area of study during a time when diverse ecosystems are most active. Learn the practical aspects of agricultural systems; conduct shoreline assessments throughout the Kawartha Lakes Region; take field trips to farms; and work with food organizations in the community; or work with community organizations in the Peterborough or Haliburton area on biomonitoring projects in our lakes and forests

STUDY THE ENVIRONMENT ANYWHERE IN THE WORLD

As part of the Trent School of the Environment, you can take your education global through several study abroad programs at other institutions across the world, field placements, research projects, or intensive language programs.

LEAD A COMMUNITY RESEARCH PROJECT

Students in the Trent School of the Environment can make a difference leading a community-based research project through the Trent Community Research Centre, working with organizations like Peterborough GreenUp, Kawartha Conservation and numerous lake associations in the region.

ON-CAMPUS WORK EXPERIENCES

As a student in the TSE, you have access to job opportunities that fit your specific interests, schedules and career goals – right on campus. Jobs include research associates in faculty labs, positions at the Trent Market Garden. There are also several undergraduate awards that can provide summer work opportunities. Grow your professional network and gain valuable experience... no commute required.

YOUR ENVIRONMENTAL CAREER AWAITS

Graduates of Trent's School of the Environment are career-ready – well-positioned to become leaders in environmental research, protection and policy, as well as in emerging fields, such as ecological restoration (bringing polluted or degraded ecosystems back to health) and carbon management (finding ways to reduce our impact on the climate).

Our graduates pursue careers in the private sector (employed by companies in the forestry and other resource industries and in environmental consulting firms); the public sector (working for international, federal, provincial, regional and municipal agencies); and with a variety of non-profit organizations, including highly respected environmental agencies. Some take their Trent education down unexpected paths, transitioning to careers in architecture, law and medicine.

What path will you choose?

Climatologist; Environmental Risk Assessor; Policy Advisor; Urban and Regional Planner; Eco-tourism Planner; United Nations Official; Landscape Restoration Ecologist; Watershed Planning Technician; Wetland Habitat Ecologist; Soil Technician; Ocean and River Chemist; Environmental Toxicologist; Environmental Geoscientist; Geochemist; Hydrogeologist; Shoreline Naturalization Biologist; Ecologist; Population Growth and Migration Specialist; Land Surveyor; Water Resources Manager; Geoscience Consultant; Ecologist; Park Ranger; Meteorologist; Geomatics Specialist; Organic Farmer; Drinking Water Policy Specialist; GIS Specialist; Teacher; Outdoor Educator; Fisheries Manager; Urban Agricultural Coordinator

**YOU COULD
WIN FIRST-YEAR TUITION***
Enter our draw every time
you visit Trent, in person or virtually

trentu.ca/wintuition

* conditions apply

Ready to start your
#TrentUBound journey?
Connect with us today.



Discover
Trent

CONNECT WITH US

We're here to help you navigate your way to Trent. Call us, or ask a question online at:

trentu.ca/connect

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OPEN HOUSE

Join us online from the comfort of your own home for a virtual Open House to discover the advantages of studying at Trent University.

Visit trentu.ca/openhouse for upcoming events and updates on in-person Open House dates at our Peterborough & Durham GTA campuses.

Learn more and register:
trentu.ca/openhouse

TAKE A TOUR

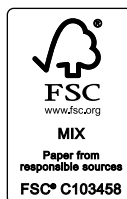
Campus tours are a great way to see the University and explore our environmental labs, classrooms and facilities for yourself. Tours are offered daily, six days a week. Book yours today:

trentu.ca/tours

CAN'T MAKE IT TO CAMPUS?

Take a virtual tour anytime

trentu.ca/virtualtour



TRENT
UNIVERSITY

SCHOOL OF THE ENVIRONMENT

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trentu.ca/environment