

# 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. Dig in to discover our unparalleled and guaranteed hands-on learning opportunities, numerous and varied degree options taught by renowned faculty, world-class laboratories and second-to-none natural, on-campus living labs.

*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 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. Now, with six ECO Canada accredited degrees, the TSE is widely recognized by the world's top environmental employers. Additionally, 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 Trent School of the Environment are also known and respected across the world as recognized credentials for some of the most prestigious postgraduate and professional schools.
- 02 Learn from the experts** – The TSE is home to globally-recognized experts tackling the world's most complex challenges ...from climate change and pollution to environmental policy and food security, and everything in between. These respected pros – some of whom are also 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.
- 03 Liberate your mind** – The School's degree options are as distinctive as you are. Our 13 degree offerings, including eight 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 and Food Systems; and Indigenous Environmental Studies. The School also boasts of 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 Get your hands dirty** – Our School 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, local and international placements and internships and hands-on research opportunities with faculty. Many of our students work with local community groups, like Peterborough Green-Up and Kawagama Lake Cottagers' Association, and get to see their community-based research contribute to real-life issues. *Explore the opportunities pages 10/11.*

# #1

UNDERGRADUATE UNIVERSITY IN ONTARIO  
#3 in all of Canada

# 7

CANADA RESEARCH CHAIRS

WORLD-RENOWNED RESEARCH FACILITIES

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

# TOP 10

GREENEST CAMPUSES IN CANADA

# #4

UNDERGRADUATE RESEARCH UNIVERSITY IN CANADA

# #1

IN CANADA FOR SCHOLARSHIPS

# 96%

OF TRENT GRADS EMPLOYED

within two years of graduating

# 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 Change Science and 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.

## **Circumpolar Studies Diploma (Online)**

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

## **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.

## **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 its kind in Canada.

## **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 – no need to write the LSATs.

## *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. Here are a few examples, just to get you thinking:

- Environmental Science and Biology
- Environmental Science and Psychology
- Environmental Studies and Business
- Environmental Studies and English
- Environmental Studies and International Development Studies
- Environmental Studies and Political Studies
- Geography and Computer Science
- Geography and Environmental Science
- Sustainable Agriculture and Business
- Sustainable Agriculture and International Development Studies

The list goes on. Let us work with you to find a joint major that best suits your 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 now 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](https://trentu.ca/graduatestudies)



# WHERE STATE-OF-ART FACILITIES MEET NATURE'S LIVING LABS

Whether you're working side-by-side with top researchers within our cutting-edge laboratories (starting as an undergrad!), or putting your knowledge to the test working outdoors in our vast natural areas, Trent offers everything you need to succeed on your path to an environmental career.

## 01 Water Quality Centre

Test the waters...literally in this world-renowned centre: the most comprehensive mass spectrometry facility in Canada and one of the most extensive analytic facilities in the world. 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. Here 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 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 labs.



06



04



05



07



08



09

## 05 Rooftop Gardens

With approximately 3500m<sup>2</sup> 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.

## 06 Experimental Farm

In this 33-acre living laboratory located right on campus, students and researchers literally get their hands dirty as they take learning to a whole new level. On the farm, students are currently growing tomatoes, lettuce, spinach, kale, squash, eggplant, watermelon, and quinoa.

## 07 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.

## 08 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.

## 09 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.

# Stories



## Helping Community

"Working on a community-based research project provided great insight into independent research and helped me improve on many skills beyond those acquired in the classroom. I was able to learn how to work more effectively in a team setting, acquire better leadership and interpersonal skills, and discover how to best utilize the different unique strengths that each member had to achieve our goals."

**Roshelle Chan**, Bachelor of Environmental Science/Studies student, completed a community-based research project with the Kawagama Lake Cottagers' Association aimed at reducing the effects of calcium decline.



## Fielding Summer Jobs

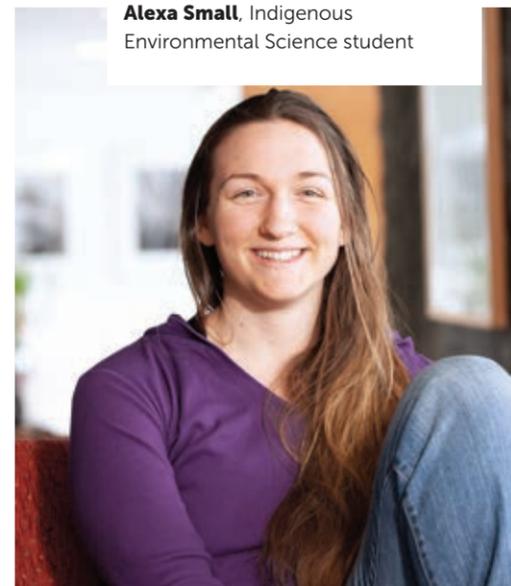
"As an Environmental Studies student at Trent, I find it really inspiring to be so immersed in the environment. My academic experience has definitely helped me to get a lot of really interesting summer jobs in my field, working with the federal and provincial governments."

**Nicole Boere**, Environmental Studies and Sustainable Agriculture & Food Systems joint major

## Personal Touch

"Here students are encouraged to open their hearts and understand the world from a greater perspective. In our program, we really value relationships between people so taking that time to care about your students is part of living what you're teaching. IES supports this concept of reciprocity so instead of taking and taking from the land and from our relationships, keeping in mind the concept of giving back and contributing to local communities. Trent University has provided a space for me to challenge my thinking and to open my heart."

**Alexa Small**, Indigenous Environmental Science student



## Getting Hands On

"At Trent, whether you're in a lab determining concentrations of a particular pollutant through a spectrometer or have other labs where you're outside, you're studying benthic invertebrates, you're digging soil pits, You're actually learning skills that are necessary for doing Environmental Science and those skills are actually built right into your classes. One giant part about your university experience should be getting hands-on experience. Trent gave me the opportunity to do research north of Fort McMurray in Alberta. Across the country, I was able to implement a study and carry it out under the supervision of a professional. That experience was absolutely amazing. It definitely puts me ahead of some of my colleagues that might not have had that opportunity at a different Canadian university."

**Eric Grimm**, Environmental & Resource Science and Biology joint major

## From Campus to Career

"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**, recent 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. The company is making use of technology that harvests moisture from the air to aid individuals and communities, and is partnering with some of the world's largest businesses, such as Anheuser-Busch InBev, to reduce industrial water consumption in areas most affected by shortages.



## 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.

# 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

Our ECO Canada-accredited degrees provide dynamic pathways for work placements or co-op opportunities post-graduation or during the summer for upper-year students. Students have worked with organizations including Ontario Public Interest Research Group, Friends of the Muskoka Watershed and the Haliburton Highlands Land Trust.

## LEARN ALONGSIDE THE 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, sampled mine tailings for contaminants, monitored water quality from agricultural run-off, tested water samples at our Water Quality Centre and identified challenges and opportunities for aging populations. What cutting-edge research will you undertake at Trent?

*Did you know?*

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

**96%** OF TRENT GRADS EMPLOYED  
within **two years** of graduating  
*CUDO 2019*

## GET INTO THE FIELD

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.

## GO INTERNATIONAL

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.

## MAKE A DIFFERENCE

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.

## GET TO WORK

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.

## THE PLACES YOU WILL GO

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?*

Environmental Engineer; 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; 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](https://trentu.ca/wintuition)  
\* conditions apply

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](https://trentu.ca/connect)

-  (705) 748-1011 ext. 7199 or 1-888-739-8885
-  289-512-0194
-  [tse@trentu.ca](mailto:tse@trentu.ca)
-  Trent School of the Environment
-  @Trent\_TSE
-  @TrentUniversity  
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-  [youtube.com/trentuniversity](https://www.youtube.com/trentuniversity)  
#TrentU  
#TrentUBound

## 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](https://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](https://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](https://trentu.ca/tours)

## CAN'T MAKE IT TO CAMPUS?

Take a virtual tour anytime  
[trentu.ca/virtualtour](https://trentu.ca/virtualtour)

