ENVIRONMENT

#BEYONDIDEAS
Join a global movement advocating for a greener, more sustainable world — because #earthgoals. And do it your way. Get outdoors and protect vulnerable ecosystems. Command a boardroom and make environmentally responsible business decisions. Design liveable communities close to home. Or work toward economic equality overseas. How do you want to leave your (carbon-free) mark on the world?

When Cai was applying to university, what stood out to him about Waterloo was that his chosen program was part of an entire faculty dedicated to the environment, which meant he would be surrounded by people who share his passion for sustainability.

Active in the campus community, Cai has a leadership role in the Environmental Student Society and is a co-founder of the Waterloo Geospatial Club.

#BEYONDIDEAS
LOCALLY GROWN. GLOBAL IMPACT.

Living our values.

Innovative features make Environment 3 the greenest building on campus, and one of only 150 buildings in Canada with LEED Platinum certification.

2-storey indoor BIOWALL

460 m² green rooftop garden patio

67,000 kwh generated by solar panels annually (enough to power 5 homes for a year)

Sustainability isn’t just a side-gig at Waterloo. We have an entire faculty dedicated to environmental studies, which means you’ll be surrounded by a whole community that shares your passion for environmental and social change.

THE WORLD IS YOUR CLASSROOM

In Environment, you won’t just sit in the classroom learning how to make the world better: you’ll take real action. Test water quality in a local creek with help from our Ecology Lab. Study disaster tourism in Indonesia on a field course. Design efficient transit routes in Toronto on a co-op term. You’ll have countless opportunities to gain hands-on experience in the field, and in communities and organizations around the world.

CAREER-READY BY GRADUATION

Choose a 5-year co-op program to try out different jobs and industries, and make valuable career contacts. Or, in a 4-year regular (non-co-op) program, use flexible summer terms to work, volunteer, travel, or take classes to fast-track to graduation. Whichever you choose, there are plenty of resources to help launch your career.

CO-OP:
Alternate study terms with paid work terms and gain 20 months of work experience by the time you graduate. We’ll guide you through the process of landing a job with one of our 6,700 employers.

EDGE CERTIFICATE:
Waterloo’s experiential education certificate for students in non-co-op programs helps you develop professional skills, explore career options, and market yourself to employers.

ST. PAUL’S GREENHOUSE
Have a great idea to change the world? Put your passion for social innovation to work in the GreenHouse social-impact incubator.

8 DIRECT-ENTRY PROGRAMS
Gain specialized skills from Day 1.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>CO-OP OR REGULAR</th>
<th>DEGREE</th>
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<tbody>
<tr>
<td>Environment and Business</td>
<td>Co-op only</td>
<td>BES</td>
</tr>
<tr>
<td>Environment, Resources and Sustainability</td>
<td>Co-op or regular</td>
<td>BES</td>
</tr>
<tr>
<td>Geography and Aviation</td>
<td>Regular only</td>
<td>BES</td>
</tr>
<tr>
<td>Geography and Environmental Management</td>
<td>Co-op or regular</td>
<td>BES</td>
</tr>
<tr>
<td>Geomatics</td>
<td>Co-op or regular</td>
<td>BES</td>
</tr>
<tr>
<td>International Development</td>
<td>Regular only</td>
<td>BES</td>
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<tr>
<td>Knowledge Integration</td>
<td>Regular only</td>
<td>BES*</td>
</tr>
<tr>
<td>Planning</td>
<td>Co-op only</td>
<td>BES</td>
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</tbody>
</table>

*Bachelor of Knowledge Integration

Travel the world. Find out how ENV students are making their mark around the globe through work terms, exchanges, overseas placements, field research and more.

#myUWENV

12,000+ Environment alumni in more than 80 countries

96% Environment co-op employment rate

$7,600-$17,000 Average earnings per co-op term
A DAY IN THE LIFE AT ENV

We asked upper year student Brodie to document a typical day as a Waterloo Environment student. These are the moments Brodie captured.

Get the full story at: uwwaterloo.ca/env/day-in-the-life

STUDENT-RUN COFFEE SHOP
serves Rainforest Alliance-certified, locally roasted coffee

ENVIRONMENT LIVING-LEARNING COMMUNITY
Live and learn with other Environment students at St. Paul’s University College residence

8 A.M. Breakfast at St. Paul’s.
9:15 A.M. Walk to class with friends.
9:30 A.M. Climate modelling lecture.
11 A.M. Review lecture notes.
12:15 P.M. Grab lunch on campus.
1 P.M. Field ecology lab.
3 P.M. Brainstorm projects ideas in the Design Studio.
4 P.M. Get a quick workout at the gym.
6:30 P.M. Dinner out in uptown Waterloo.
9 P.M. Meet up with friends at Waterloo Public Square.
Think green. Get the green.

To influence organizations big and small, you have to speak the language of both the CEO and community activist. With a degree in Environment and Business, you'll stand out to future employers with your business acumen and understanding of environmental issues. You'll gain expertise in stakeholder engagement, industrial ecology, and environmental decision-making while developing core business skills in finance, project management, accounting, marketing, and law.

Sample course topics: environmental management systems, ecological economics, social marketing, industrial ecology, microeconomics, accounting for managers.

Apply these skills:
- Develop business plans for green energy firms.
- Analyze the environmental records of a Fortune 500 company.
- Help businesses reduce their ecological impact.

#BeyondIdeas
Environment and Business prepares you for the workplace with 20 months of co-op education and a final capstone project. Working in small groups, you'll be matched with an industry partner and help them integrate sustainability into their organization. Tristan's capstone involved an environmental audit for a large retailer. "Our client trusted that we were the experts and let us run with what we saw as the best way forward."

#1 in Canada
for adding sustainability to business programs – Corporate Knights
ENVIRONMENT, RESOURCES AND SUSTAINABILITY

CO-OP AVAILABLE

See the forest through the trees

Complex problems need to be looked at from different angles. In Environment, Resources and Sustainability, you’ll use insights from the natural and social sciences to help solve some of the world’s biggest environmental challenges, from water and food to energy and biodiversity. Explore the interactions between people and nature that lie at the heart of socio-ecological challenges and learn to change society’s perspective on the environment.

Sample course topics: applied ecology and restoration, environmental governance, research methods, economics and sustainability

26 ELECTIVES
Add a double-major, minor, or option

WORK ONE-ON-ONE
with a professor on an 8-month capstone research project

EARN DIPLOMAS
in Environmental Assessment and Ecological Restoration and Rehabilitation

APPLY THESE SKILLS
Bring your knowledge to a growing number of fields:
- Green technology
- Ecological restoration
- Environmental law and governance

#BEYONDIDEAS

Bailey was part of a group of 7 Waterloo students who travelled to Marrakesh, Morocco, for COP22, the United Nations’ global conference on climate change. She joined representatives from more than 196 countries working together to fight global warming. “COP22 confirmed my decision to be part of the bigger picture. I want to pursue environmental policy as a career.”

With flexible requirements and room for plenty of electives, Bailey was able to add a Philosophy minor to her degree, and was also part of the GreenHouse social innovation incubator, where she developed an app to help people find environmental alternatives when renovating a house. “I could take my degree in any direction I wanted.”
**Let’s fly**

Explore aviation as both a geographer and a pilot. You’ll earn a degree while completing flight training to acquire your commercial pilot licence, which includes your multi-engine and multi-instrument ratings. Gain a deep understanding of landforms, weather patterns, and the computer technology behind tools such as geographic information systems (GIS) and remote sensing.

Sample course topics: geography and human habitat, human factors in aviation, physical climatology, principles of GIScience

**STUDY AND FLIGHT TRAINING SEQUENCE**
You’ll take your flight training at the Waterloo Wellington Flight Centre, one of the five largest flight schools in Canada.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FALL TERM</th>
<th>WINTER TERM</th>
<th>SPRING TERM</th>
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<tr>
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<td>2</td>
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<td>3</td>
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<td>Study + Flight (20 hours)</td>
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<tr>
<td>4</td>
<td>Study</td>
<td>Study</td>
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**#BEYONDIDEAS**
In partnership with the University of Waterloo and Waterloo Wellington Flight Centre, Sunwing Airlines launched a cadet program to recruit the most promising young pilots in Canada. Chelsea Anne was one of four Waterloo Aviation graduates to be hired immediately after graduation and complete the rigorous cadet program. All 4 recruits are now flying as First Officers.

**SPECIALIZATIONS AVAILABLE**
- Climate Change
- Earth Systems Science
- Geomatics
- Development and Environment
Geographers have a long tradition of exploring how the Earth's human and physical environments are constantly changing. You'll learn the advanced technical skills required to help solve many of the most pressing issues of our time, such as climate change; the impact of environment on health; water and land resource management; global population growth; urban development; and more.

Sample course topics: population dynamics, water and soil systems, transportation, food systems, geographic information systems, tourism, statistics, economic inequality, climate change and research methods.
GEOMATICS

Getting technical

More than 80% of the world’s information has a location component to it. Geomatics combines computer science with geographic data analysis. You’ll learn to use tools, such as remote sensing, computer mapping, geographic information systems (GIS), and global positioning systems (GPS), to analyze a wide variety of information and make informed decisions.

Sample course topics: spatial analysis, computer programming, statistics, surveying, database development, unmanned aerial vehicle (UAV) use, enterprise information technology, web development, satellite imagery.

ACCESS COOL TECHNOLOGY
such as UAVs, satellite data, and high-end software

DEVELOP
software apps in class and pitch them to real businesses

SPECIALIZATIONS AVAILABLE
- Climate Change
- Development and Environment
- Earth Systems Science

APPLY THESE SKILLS
Geomatics expertise is needed in many industries:

- Business: help businesses determine where to expand
- Public health: track the incidence of disease
- Urban planning: plan land use and transportation routes

#BEYONDIDEAS

Learn the fundamentals of software design in one of the world’s top computer science schools. Geomatics includes 4 computer science courses at the David R. Cheriton School of Computer Science. Take additional courses to add a computing option to your degree.

Geomatics students can expect a mix of fieldwork, classwork and lab time, plus paid work experience in the co-op stream. Geomatics has applications across many industries: you might develop mapping software, support disaster recovery efforts, or inform economic and environmental policy.

CO-OP AVAILABLE

ACCESS COOL TECHNOLOGY
DEVELOP
SPECIALIZATIONS AVAILABLE
APPLY THESE SKILLS
#BEYONDIDEAS

Getting technical

More than 80% of the world’s information has a location component to it. Geomatics combines computer science with geographic data analysis. You’ll learn to use tools, such as remote sensing, computer mapping, geographic information systems (GIS), and global positioning systems (GPS), to analyze a wide variety of information and make informed decisions.

Sample course topics: spatial analysis, computer programming, statistics, surveying, database development, unmanned aerial vehicle (UAV) use, enterprise information technology, web development, satellite imagery.
If you choose to participate in the 8-month overseas placement, your placement is guaranteed. Our field placement coordinator will help you find the right experience.

**Sample course topics:** economics, culture and ethics, cities and development, environmental research methods, planning, geography

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### BEYOND IDEAS

In partnership with the World University Service of Canada, your final 2 terms will be spent on a guaranteed field placement overseas, where you’ll put your skills and knowledge to use. Develop programs that create income opportunities for poor communities, tackle social issues such as child labour and gender equality, or provide needed services such as clean water or microfinancing for small businesses.

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### STUDY SCHEDULE

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<tbody>
<tr>
<td>1</td>
<td>Study</td>
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<tr>
<td>3</td>
<td>Study</td>
<td>Study</td>
<td>Study</td>
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<tr>
<td>4</td>
<td>Overseas Placement</td>
<td>Overseas Placement and capstone*</td>
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*Students return to campus from their field placement for a 1-week capstone session in April.

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### OVERSEAS PLACEMENT

- Centre for the Study and Promotion of Development (DESCO), Lima, Peru
- Fair Trade Group Nepal, Kathmandu, Nepal
- Solidarité et entraide mutuelle au Sahel (SEMUS), Yako, Burkina Faso
- Centre for Sustainable Rural Development, Hanoi, Vietnam

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Apply for one of four St. Paul’s International Development Continuing Scholarships valued at $10,000

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If you choose to participate in the 8-month overseas placement, your placement is guaranteed. Our field placement coordinator will help you find the right experience.
We built this city

Tackle the environmental and social challenges facing our cities and rural areas. In this accredited professional program, you’ll learn to manage the sustainable growth of communities. As a planner, you’ll learn to guide residential development, design efficient transportation routes, create programs that make communities healthier, or advise governments and private companies on environmental issues.

Sample course topics: economics, law, design and communication, public health, issues in housing, transportation planning and analysis.

SPECIALIZATIONS AVAILABLE

› Urban Design
› Environmental Planning and Management
› Decision Support and Geographic Information Systems
› Land Development Planning

APPLY THESE SKILLS

Design urban spaces
Preserve natural spaces and parks
Develop transportation networks
Create economic capacity in communities

#BEYONDIDEAS
Planning at Waterloo is one of only 2 undergrad programs in Ontario recognized by the Canadian Institute of Planners. When you graduate, you’ll have advanced standing in the requirements for becoming a registered professional planner. Get a head start on building your career in our accredited program and benefit from the School of Planning’s extensive ties with the professional planning community.

PLANNING
ENVIRONMENT AT WORK

We checked in with recent grads within 5 years of graduating, and they’re employed in a wide range of jobs and industries. When it comes to working for a more sustainable future, the opportunities are endless.

33% Environment and Business
17% Environment, Resources and Sustainability
10% Agriculture, Utilities, Mining, and Construction
10% Manufacturing, Distribution, and Retail
7% Public Administration
6% Leisure and Hospitality
5% Education
4% Finance and Insurance
4% Transportation
3% Health Care and Social Assistance
2% Professional, Scientific, and Technical Services
1% Non-profit
9% Trade unions

ENVIRONMENT AND BUSINESS
Social Compliance Coordinator, Hudson’s Bay Company
Environmental Health & Safety Consultant, Stanac Consulting
Sustainability Analyst, Sun Life Financial

ENVIRONMENT, RESOURCES AND SUSTAINABILITY
Biodiversity Officer, Ministry of Natural Resources and Forestry
Environmental Consultant, North Shore Environmental Consultants
Senior Programme Officer, United Nations

GEOGRAPHY AND AVIATION
Pilot, Transat Air
First Officer, Sunwing Airlines
Fight Training Instructor, Waterloo Wellington Flight Centre

GEOGRAPHY AND ENVIRONMENTAL MANAGEMENT
Environmental Coordinator, City of Guelph
Associate, Climate Change, Ernst & Young
Environmental Chemical Analyst, Environment Canada

GEOIMICS
GIS Specialist, CarVice
Software Developer, Envi Canada
Senior Application Analyst, Accenture

INTERNATIONAL DEVELOPMENT
Program and Grant Officer, World Vision International
Program Development Consultant, Oxfam Canada
Policy Brief Writer, North South Institute

PLANNING
Land Use Planner, Borden Ladner Gervais
Transportation Planner, City of Guelph
Urban Forestry Project Coordinator, Roni Excavating

KNOWLEDGE INTEGRATION
See the Knowledge Integration brochure for more about career options.

SAMPLE CAREERS

CO-OP SEQUENCE
In co-op, you’ll alternate study and paid work terms starting in your second year.

ENVIRONMENT SUBPLANS
Add additional areas of study through minors, options and diplomas. Find out more in the undergraduate calendar.

KNOWLEDGE INTEGRATION
More than a traditional arts and science program, Knowledge Integration lets you explore and integrate your many interests. Learn more in the Knowledge Integration brochure.

ADMISSIONS

ADMISSIONS AVERAGE
Environment and Business
Environment, Resources and Sustainability
Geography and Aviational
Geomatics
International Development
Knowledge Integration

SCHOLARSHIPS
Dean of Environment’s Scholarship for Excellence: $7,500
Five scholarship winners will be selected based on academic excellence (85% or higher), demonstrated leadership and a passion for the environment. Learn more and apply at uwaterloo.ca/en/scholarships