

Environmental Science/studies

Made in Windsor.



ENVIRONMENTAL SCIENCE

ENVIRONMENTAL STUDIES

INTERDISCIPLINARY ARTS AND SCIENCE



uwindsor.ca/science



**Environmental Science/Studies
Experience Map**



**University
of Windsor**

Highlights and Skills

PROGRAM HIGHLIGHTS

Environmental Science **H****T** Food and water security for all North Americans depends on the Great Lakes, and environmental scientists play a critical role in their management and sustainability. Here, at the heart of the Great Lakes, we provide our students with comprehensive and balanced training in the physical and living environment – atmosphere, hydrosphere, geosphere, biosphere. Through a systems-based approach, you will learn and apply a diversity of scientific tools and skills to understand the structure, function and health of this globally important freshwater resource. Our students have the skills employers are looking for!

MIN. AVG.* 70% ONTARIO COURSE REQUIREMENTS
ENG4U, MHF4U, SCH4U, and SBI4U. 70% average in all required science and math courses.

Environmental Studies **H** Sustaining human populations while maintaining environmental quality and diversity is the greatest challenge of our age. Addressing this challenge requires a new generation of multidisciplinary specialists

in human-environment interactions. Pursue your diverse environmental interests in one of the first truly multidisciplinary programs of its kind in the country. Combine study of environmental science, law, policy, ethics and management, among others, to produce a unique educational experience with the relevant knowledge and skills required by potential employers.

MIN. AVG.* 70% ONTARIO COURSE REQUIREMENTS
ENG4U required.

Interdisciplinary Arts and Science **H**
If high achievement is in your DNA, this elite program is for you. It's for students who want to develop knowledge and skills in the sciences and the arts, humanities and social sciences. You can tailor your program to match your interests and career aspirations. Our students go on to do research or graduate degrees in their field. This program is small by design to give your talents the attention they deserve

MIN. AVG.* 80% ONTARIO COURSE REQUIREMENTS
ENG4U, MHF4U, and two from SBI4U, SCH4U, or SPH4U. MCV4U is strongly recommended.

FUNCTIONAL KNOWLEDGE

- Understand and analyze the impact of natural and human influences on economic, political, cultural, and environmental systems
- Discuss major topics in environmental science and studies, including climate change, population trends and globalization, resource management, and environmental assessment and monitoring
- Observe and assess changes in various environments and interpret their impact on biogeochemical systems
- Operate advanced scientific laboratory equipment and field instruments
- Acquire, organize, and interpret accurate data sets; perform statistical analyses
- Propose optimal land use and resource allocation for conservation and sustainability
- Visualize and model complex environmental datasets using geospatial technologies

H Honours – 4-year program **T** Thesis available * Minimum grade point average for admission to program. A higher average may be required.

Build your Skills and Experience

Your UWindsor experience is more than attending classes. It is a combination of academics, co-curricular activities, and extracurricular involvement. By making the most of all three elements of your university experience, you will maximize your opportunities to build your skills, broaden your personal network, and clarify your long term academic and career goals.

	CURRICULUM Courses of study specific to each program
	CO-CURRICULAR Activities and experiences that complement coursework (Outstanding Scholars, peer mentoring, VIP)
	EXTRACURRICULAR Activities falling outside the scope of set curriculum (Part-time job, clubs, volunteering, athletics)

Career Planning Cycle

Intentional career planning will help you prepare for your next step after graduation and beyond. It is a fluid, dynamic, and lifelong process. You can move on or return to an earlier stage in the cycle at any time.



Explore Opportunities Using This Chart

Explore a selection of opportunities recommended for students in your program. This chart shows some of your many options – you don't have to do everything on it or limit yourself to it. Engage in opportunities from each of the three categories to set yourself up for success.

High-Impact Practice (HIP)

A HIP is an enriching educational experience that can be life-changing and often includes learning outside of the classroom while encouraging meaningful interaction and collaboration, such as:

- Co-op, internship or field experiences
- Research with faculty
- Culminating senior experience
- Capstone courses
- Service-learning
- Learning communities
- Study abroad

Academics

Your Coursework



First Year

- Take required courses including Introduction to Environmental Science or Introduction to Environmental Studies
- Review degree course requirements for all years of study and mesh them with professional or graduate school aspirations
- Participate in our **PASS** program during **Welcome Week** to be coached on the skills necessary to be successful as a Faculty of Science student
- Begin thinking about specific facets of the environment on which you would like to focus your studies for later years
- Meet with an academic advisor in the School of the Environment
- Receive peer mentorship from an upper-year **MySci** advisor

Middle Years

- Take required courses and check in with academic advisor to make sure you are on the right path
- Look into completing an undergraduate research project in final year 
- Begin taking courses in accordance with **Resource Management** or **Environmental Values and Policy** area of concentration (Environmental Studies)
- Seek out courses that offer experiential learning 
- Continue taking courses required as preparation for professional schools
- Study for and take professional school admission tests of interest
- Consider completing required courses for Geography teachable option

Final Year

- Meet with an academic advisor to go over graduation requirements
- Complete all required courses for your degree
- **Apply** to graduate through **UWinsite Student Portal**
- Undertake an undergraduate research project with faculty member 
- **Apply** your knowledge through a field course to optimize your senior experience 

Experience

Ways To Get Involved



- Begin the process of becoming a **LEAD Medallion Scholar** and participate in credit and volunteer activities 
- Be **Engaged** by volunteering in a lab to help with research for professors and graduate students 
- **Discover** research opportunities as part of the **Outstanding Scholars program** 
- Join the **USci Network** to take part in collaborative and integrative science experiences
- Join a club like the **Jull**, **Environmental Club** or **Science Society**
- Participate in the **Bystander Initiative workshop** to gain skills that will help you be an effective and supportive ally to prevent sexual assault on campus
- Apply for a co-curricular experience such as **VIP - Community Service Learning**
- Join a professional association in your field such as the **Environmental Studies Association of Canada** or **NPGO**

- **Apply** your knowledge through a summer **Research Assistant** or **Teaching Assistant** position within the School of the Environment 
- Participate in the **UWill Discover** undergraduate research conference 
- Gain a **Global Perspective of Science (GPS)** through an international exchange or by studying abroad 
- Be **Engaged** through service learning opportunities with **Let's Talk Science** and **Science Rendezvous** 
- Expand your skills by taking on a summer, part-time or volunteer position
- Gain valuable **Leadership** skills through roles within a club or society
- Take part in a field course off-campus 

- Conduct research with faculty member 
- Become a tutor for **Students Offering Support (SOS)** 
- Become a **MySci** advisor to provide academic support and mentorship for first-year students
- Complete **LEAD Medallion Scholars** in two areas for Bronze, three areas for Silver, or four areas for Gold in accordance with **Leadership, Engagement, Application, Discover** 

Career

Plan Ahead For What's Next



- Start planning your career by making a list of things you enjoy, your skills and areas where you excel
- Meet with a career advisor in **Career Development and Experiential Learning (CDEL)** for help developing a plan for your future years
- Consider a career assessment appointment to help you identify possible career paths
- Get involved with a part-time job, volunteer opportunity, campus group, or research assistantship
- Attend **CDEL workshops** to learn how to find a summer or part-time job and write a university-level resumé
- Analyze the requirements for graduate or professional schools
- Determine courses required to meet professional accreditation, such as with **Professional Geoscientists of Ontario (PGO)**
- Chat with an advisor during **CDEL's Drop-In** hours to get answers to your career and job search questions

- Research career fields and occupations with the help of a **CDEL** career advisor
- Explore opportunities and meet potential employers by participating in **Job Shadow Experience**, job fairs and industry networking events
- Create a **LinkedIn** profile and have it critiqued by **CDEL**
- If you are considering applying to graduate or professional school, be aware of early application deadlines
- Take part in informational interviews and join online communities like **LinkedIn** and **Ten Thousand Coffees** to connect with people in your targeted profession or industry
- Search job postings to learn what skills, knowledge, and credentials you will need for potential careers

- Meet with **CDEL** to prepare application documents like a resumé, cover letter, CV, or personal statement for jobs and education programs you are applying to
- Attend **CDEL's workshops** on interview skills and job search strategies
- Set up a mock interview with a career advisor for professional school or job applications
- Take part in recruitment events and job fairs, including those organized by **CDEL**
- Compose a portfolio of relevant academic and work experience
- Explore professional development opportunities through **Continuing Education**

Life After Graduation

27 Number of Graduates
(2018)

100% Employment Rate of Graduates

Employment rate of graduates 2 years following degree completion (OUGS Physical Sciences, 2018)

Career Tracks*

Agricultural specialist
Air quality specialist
Business advisor
Climate change manager
Compliance officer
Conservation officer
Consultant
Data entry technician

EHS specialist
Environmental scientist
Forest ecologist
GIS technician
Hydrologist/Hydrogeologist
Journalist
Lawyer
Meteorologist

Modeller
Park ranger
Policy analyst/regulator
Politician
Professor
Project manager
Research scientist
Soil scientist

Sustainability specialist
Teacher
Waste management director
Water quality control
Wildlife management

*Additional education and/or training required for some of the above careers.



Common Industries For Graduates

- **Academia and research**
- **Agriculture and food science**
- **Conservation and outreach**
- **Ecosystem assessment/management**
- **Education: Curriculum design, teaching**
- **Energy and mineral resources sector**
- **Government:** Enforcement and policy development
- **Health, law, and business professions**
- **Industry:** Environmental consultation and assessment
- **Water resource assessment and management**

Career-Readiness Competencies





Campus Resources

- Research scholarships and bursaries through the **Student Awards and Financial Aid Office**
- Visit **Leddy Library** and the **Writing Support Desk** for help with academic assignments
- Check out the **Bounce Back** program designed to improve academic performance as well as decrease feelings of stress and anxiety through both effective learning strategies and life skills acquisition
- Build leadership skills and find leadership opportunities at the **Leadership Hub**
- Get advice and support about your academic status by making an appointment with **Academic Advising**
- Seek out assistance with academic accommodation from **Student Accessibility Services**
- Discover ways to get involved on campus through the **Student Success and Leadership Centre**
- Look into the **Ignite: Work Study program** for on-campus employment opportunities
- Get assistance developing your career plan and job search skills from **Career Development and Experiential Learning**
- Consult with the **EPICentre** if you are interested in starting your own business
- Broaden your cultural awareness through the **International Student Centre** and **Student Exchange Office**
- Find support for Indigenous learners and broaden your understanding of Indigenous culture by visiting **Turtle Island**
- Tend to your health and wellness with support from **Student Health Services, the Wellness Outreach Office** and **Lancer Recreation**
- Receive confidential mental health counselling delivered by trained professionals at the **Student Counselling Centre**
- Prevent. Resist. Support. Seek personal support or learn more about sexual violence prevention and resistance education through the **Sexual Misconduct Response and Prevention Office**
- Explore professional development opportunities through **Continuing Education**



experience.uwindsor.ca

Student Recruitment

Phone: 519-973-7014

Toll-Free: 1-800-864-2860

Email: info@uwindsor.ca

School of the Environment

Phone: 519-253-3000, Ext. 2528

Email: earth@uwindsor.ca

Career Development and Experiential Learning

Phone: 519-253-3000, Ext. 3895

Email: careerservices@uwindsor.ca