



EXPERIENCE MAP

Earth and Environmental Science



FUTURE FULL OF PROMISE.



University of Windsor

ENVIRONMENTAL SCIENCE

ENVIRONMENTAL STUDIES

INTERDISCIPLINARY ARTS AND SCIENCE

EXPERIENCE.UWINDSOR.CA

Skills and Knowledge of Earth and Environmental Science Graduates

PROGRAM HIGHLIGHTS

Environmental Science: The University of Windsor is located at the heart of the Great Lakes—an unequalled natural laboratory to apply scientific approaches to the environment and create solutions to important environmental issues. Our classes provide you with a comprehensive learning experience, incorporating all major components of the physical and living environment—geosphere, hydrosphere, atmosphere and biosphere.

Environmental Studies: Benefit from a multi-disciplinary learning experience that blends diverse academic disciplines. Learn about the range of social, cultural, economic, political, legal, and ethical factors that influence human interaction with the environment and gain literacy in aspects of the physical and biological sciences to better understand natural environmental processes.

Interdisciplinary Arts and Science: If you're a highly motivated student who wants knowledge and skills that will familiarize you with the humanities, social sciences and natural sciences, this elite program is for you. Design your program to match your interests and career aspirations. Provides the foundation for a master's program, professional school (medicine, optometry, dentistry, occupational therapy, naturopathic medicine, law, MBA, pharmacy), or teaching (with additional studies).

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

Degree Title / Program	Minimum Average	Admission Requirements
ENVIRONMENTAL STUDIES	70%	ENG. required.
ENVIRONMENTAL SCIENCE	70%	ENG., ADV. FUNC., CHEM., and PHYS. required. CALC. VEC. strongly recommended for Environmental Science. 70% average in all attempted Science and Math courses, excluding DATA M.



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

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.

Career Planning Guide

Intentional career planning will help you prepare for your next step after graduation. It is a fluid, dynamic, and continuous process, meaning you can move on or return to an earlier stage at any time. You can even work through simultaneous cycles, like one for your long-term dream job and another for a summer job.



Explore Opportunities Using This Guide

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:



Academics

- Your coursework



Experience

- Ways to get involved



Career

- Plan ahead for what's next

HIP 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



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 **Department of Earth and Environmental Sciences**
- 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 **HIP**
- 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 **HIP**
- 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 **MyUWindsor Portal**
- Undertake an undergraduate research project with faculty member **HIP**
- *Apply* your knowledge through a field course to optimize your senior experience **HIP**

Experience



- Begin the process of becoming a **LEAD Medallion Scholar** and participate in credit and volunteer activities **HIP**
- Apply for a co-curricular experience such as **VIP** **HIP**
- Be *Engaged* by volunteering in a lab to help with research for professors and graduate students **HIP**
- *Discover* research opportunities as part of the **Outstanding Scholars** program **HIP**
- Join the **USci Network** to take part in collaborative and integrative science experiences
- Join a club like the **Jull Society, Environmental Studies 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* your knowledge through a summer Research Assistant or Teaching Assistant position within the **Earth and Environmental Sciences Department** **HIP**
- Participate in the **UWill Discover** undergraduate research conference **HIP**
- Gain a **Global Perspective of Science (GPS)** through an international exchange or by studying abroad **HIP**
- Be *Engaged* through service learning opportunities with **Let's Talk Science** and **Science Rendezvous** **HIP**
- 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 **HIP**

- Join a professional association in your field such as the **Environmental Studies Association of Canada** or **NPGO**
- Conduct research with faculty member **HIP**
- Become a tutor for **Students Offering Support (SOS)** **HIP**
- 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* **HIP**

Career



- Create lists of things that you enjoy, areas in which you excel, and your skills
- 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 workshop or 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 resumé and cover letter
- Analyze the requirements for graduate or professional schools

- Research career fields and occupations with the help of a **CDEL** career advisor
- Explore opportunities and meet employers through job fairs and employer networking events
- Explore further educational opportunities by attending the **Graduate and Professional Schools Fair** and researching admission requirements for programs you are interested in
- Attend **CDEL's Using Social Media to Leverage Your Career** workshop
- Create a **LinkedIn** profile and have it critiqued
- If you are considering applying to graduate or professional school, be aware of early application deadlines

- 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 an **Interview Skills Workshop** and **Job Search Tips Workshop**
- Use **InterviewStream** to practice your interview skills online
- Set up an in-person mock interview with a career advisor for professional school or job applications
- Meet employers at the annual job fair in January
- Compose a portfolio of relevant academic and work experience

Earth and Environmental Science

Life After Graduation

100%

Employment rate of graduates
2 years following degree
completion *(OUGS Physical Sciences, 2014)*

31

Number of Earth and
Environmental Science
Graduates (2017)



COMMON INDUSTRIES FOR EARTH AND ENVIRONMENTAL SCIENCE 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 TRACKS*

Agricultural specialist
Air quality specialist
Business advisor
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.

CAREER-READINESS COMPETENCIES



Critical Thinking and Problem Solving

Using strategic and creative thinking to make decisions and evaluate solutions



Teamwork and Collaboration

Working as a productive member of a group and collaborating with others to achieve set goals



Professionalism and Work Ethic

Demonstrating personal management practices and a high level of integrity and ethical behaviour



Communication

Appropriate and effective articulation of ideas and information to a range of audiences



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
- Explore mentorship opportunities through the **Connecting4Success (C4S)** and **Bounce Back** programs
- Improve study skills through the **Skills to Enhance Personal Success (STEPS)** program
- 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
- Apply to **VIP** to get involved in a community service learning experience
- 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** and **Lancer Recreation**
- Receive confidential mental health counselling delivered by trained professionals at the **Student Counselling Centre**
- Seek personal support or learn more about sexual violence education through the **Sexual Misconduct Response and Prevention Office**

Student Recruitment

Phone: 519-973-7014
Toll-Free: 1-800-864-2860
Email: info@uwindsor.ca

Department of Earth and Environmental Sciences

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
experience.uwindsor.ca



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