

ENVIRONMENTAL ENGINEERING **CO-OP**
AVAILABLE

Experience Map

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ENVIRONMENTAL ENGINEERING

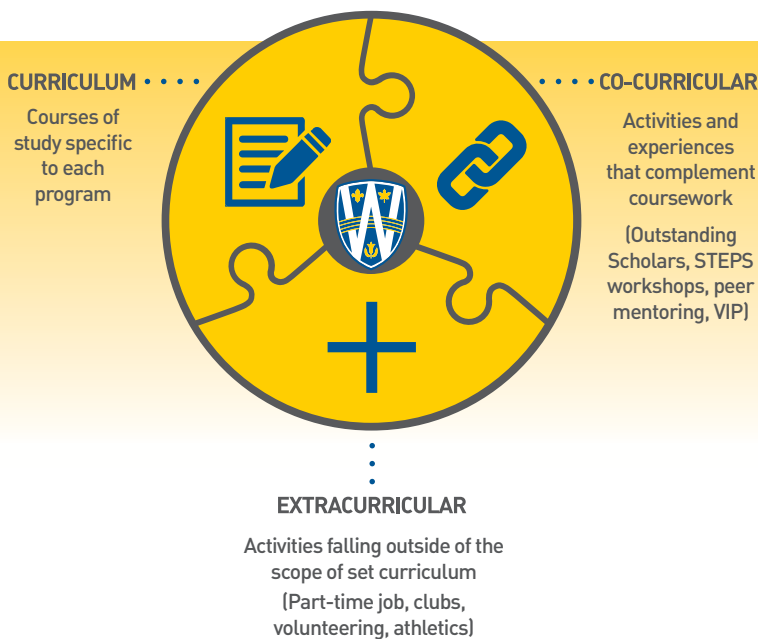
SKILLS AND KNOWLEDGE OF ENVIRONMENTAL ENGINEERING GRADUATES

PROGRAM HIGHLIGHTS

- **Environmental Engineering** – The first environmental engineering degree program in Canada. After first year, specialize in such subjects as air pollution, water pollution control, chemical reaction engineering, environmental microbiology, waste management, and assessing the sustainability and environmental performance of engineering projects and systems. Co-op option available.

FUNCTIONAL KNOWLEDGE

- Designing processes and systems to remove contaminants before they are released into the environment
- Understanding contemporary best practices and long-term industry goals for sustainable, environmentally conscious technologies and processes
- Planning effective, large-scale projects that manage resources and balance considerations including cost, quality, and speed
- Analyzing complex problems and breaking them down into steps/component parts
- Paying keen attention to detail and producing error-free, work to precise quality standards
- Designing professional-quality products and processes, considering technical, environmental, ethical, and commercial considerations



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.



Experience Map

HOW TO USE THIS GUIDE

This guide is meant to help you explore various opportunities throughout the course of your UWindsor experience. It is intended to help you link academics, co-curricular, extra-curricular and career planning activities by suggesting some of the options available to you. This is to help you see what you can do, rather than what you are required to do!

Academics



First Year

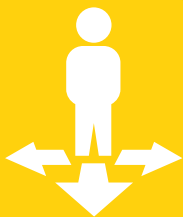
- Take required courses that are common for all first-year engineering students to provide flexibility in program choice
- Review degree course requirements
- Begin thinking about specific aspects of Environmental Engineering to focus on for later years
- Meet with an academic advisor such as the undergraduate co-ordinator or department head
- Receive academic support, mentoring and advising from the WINONE office in the Centre for Engineering Innovation

Experience



- Explore co-op options and consider applying in fall of second year*
- Apply for a co-curricular experience such as the Volunteer Internship Program (VIP)*
- Investigate research opportunities as part of the Outstanding Scholars program*
- Aid fourth-year students with their research for their final-year capstone project
- Gain experience by taking on a summer job
- Research student exchange opportunities for middle years*
- Join a club like the Engineering Student Society, UWindsor Green or Students Offering Support

Career



- Create a list of things that you enjoy, areas in which you excel, and your skills
- Meet with Career & Employment Services (CES) to develop a plan for your future years
- Consider taking an interest assessment to help you identify possible career paths
- Attend a CES workshop to learn how to find a summer or part-time job
- Become familiar with the mySuccess online job search tool
- Attend a CES resumé and cover letter workshop to get your resumé critiqued

Middle Years

- Take required courses and check in with academic advisor to make sure you are on the right path
- Look into completing a research project with a faculty member in final year★
- Begin taking courses in accordance with Environmental Engineering major requirements
- Participate in the UWill Discover undergraduate research conference★
- Consider specializing in air pollution, water pollution control, chemical reaction engineering, environmental microbiology, waste management or sustainability
- Seek out internships and courses that offer field experience★
- Start taking courses required as pre-requisites for graduate/professional school
- Consider declaring a minor and/or specialization

- Join a professional association in your field such as the Canadian Society for Civil Engineering
- Volunteer at a local environmental engineering firm to network with industry professionals
- Apply to co-op in fall of second year★
- Complete co-op work term I in the summer of second year and work term II in winter of third year★
- Apply for student exchange★
- Expand your skills by working full time in your off semesters or taking on a part-time or volunteer position during your academic terms
- Look for a leadership role in a club or society

- Research career fields and occupations
- Explore opportunities and meet employers through a job fair or employer information session
- Attend the Graduate and Professional Schools Fair to explore further educational opportunities
- Analyze the requirements for graduate or professional schools
- Make an appointment with Career & Employment Services to explore career options
- Create a LinkedIn profile and have it critiqued
- Take part in informational interviews through sources such as Ten Thousand Coffees

Final Year

- Meet with faculty and academic advisor to review degree requirements
- Complete all required courses to fulfill degree audit
- Apply to graduate through MyUWindsor Portal
- Work with a faculty member on a research project or publication★
- Consider completing required courses for Honours Certificate in Civil Engineering to pair with degree
- Take a capstone course to optimize your senior experience★

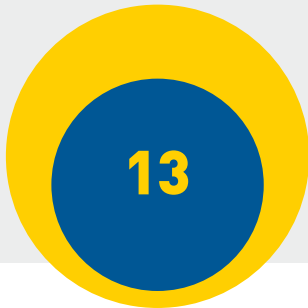
- Complete co-op work term III in the fall semester★
- Conduct field research with faculty member★
- Become a tutor for Students Offering Support (SOS)
- Utilise your knowledge and skills to complete a design experience project in your final-year collaborative capstone course★
- Complete all required technical and approved non-technical electives

- Consider applying to graduate or professional school and be aware of early application deadlines
- Meet with Career & Employment Services to prepare such application documents as a resumé, cover letter, CV or personal statement
- Attend an Interview Skills Workshop and Job Search Tips Workshop
- Set up a mock interview for professional school or job applications
- Meet employers at the annual job fair in January
- Compose a portfolio of relevant academic and work experience

ENVIRONMENTAL ENGINEERING

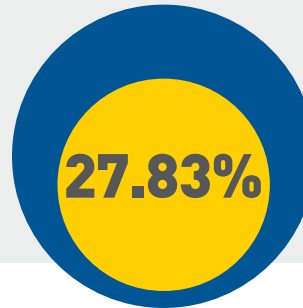
LIFE AFTER GRADUATION

2016



Number of University of Windsor graduates from Environmental Engineering programs in 2016.

2013



Percentage of Environmental Engineering graduates from Canadian universities who continue studying after a Bachelor's degree.
(National Graduates Study 2013)



COMMON INDUSTRIES FOR ENVIRONMENTAL ENGINEERING GRADUATES

- Academia and research
- Education
- Engineering
- Energy/utilities sector
- Environmental advocacy, conservation, consulting
- Government
- Industry and manufacturing
- Patent/intellectual property law
- Technical consulting, sales, training
- Telecommunications

CAREER TRACKS*

Biological engineer	Environmental geologist	Marketing manager	Quality assurance supervisor
Consultant	Facility manager	Office manager	Research and development
Design engineer	Financial director	Operations director	Research co-ordinator
Doctor	GIS modeler	Policy analyst	Structural engineer
EHS manager	Industry trainer	Professor	Teacher
Energy resources manager	Lawyer	Project manager	Technical engineer
Environmental engineer	Logistician	Public affairs officer	Water resources engineer

* 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

- Applying new and/or unfamiliar information and technologies to diverse situations and settings
- Exercising high-level numeracy and performing computations
- Defining research problems and developing research models



Professionalism and Work Ethic: Demonstrating personal management practices and a high level of integrity and ethical behaviour

- Identifying priorities and preferable courses of action to execute necessary tasks
- Managing time, data, and resources to meet deadlines
- Working efficiently by systematizing tasks pertaining to your work



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

- Managing projects and teams of varying sizes
- Leading and interacting with colleagues who reflect different backgrounds, learning styles, and approaches
- Overseeing contributions to a project, determining outcomes, planning details, delegating, and completing tasks



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

- Preparing and delivering data-driven oral and written presentations and reports using technological aids
- Establishing and communicating hypotheses for projects
- Compiling and organizing facts and information in a presentable manner



CAMPUS RESOURCES

- Visit **Leddy Library** and the **Writing Support Desk** on the main floor for help with academic assignments
- Improve study skills through the **Skills To Enhance Personal Success (STEPS)** program
- Discover ways to get involved on campus through the **Student Success and Leadership Centre**
- Explore mentorship opportunities through the **Connecting4Success (C4S)** and **Bounce Back** programs
- Apply to the **Volunteer Internship Program (VIP)** to get involved in the community
- Look into the **Work Study** program for on-campus employment opportunities
- Broaden your cultural awareness through the **International Student Centre** and **Student Exchange Office**
- Get assistance developing your career plan and job search skills from **Career & Employment Services**
- Consult with the **EPICentre** if you are interested in starting your own business
- Seek out assistance with academic accommodation from **Student Accessibility Services**
- Tend to your health and wellness with support from **Student Health Services, Lancer Recreation** and the **Student Counselling Centre**

Recruitment Office

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

WINONE Office

Phone: 519-253-3000, Ext. 2560
Email: winone@uwindsor.ca

Career and Employment Services

Phone: 519-253-3000, Ext. 3895
Email: careerservices@uwindsor.ca
experience.uwindsor.ca



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