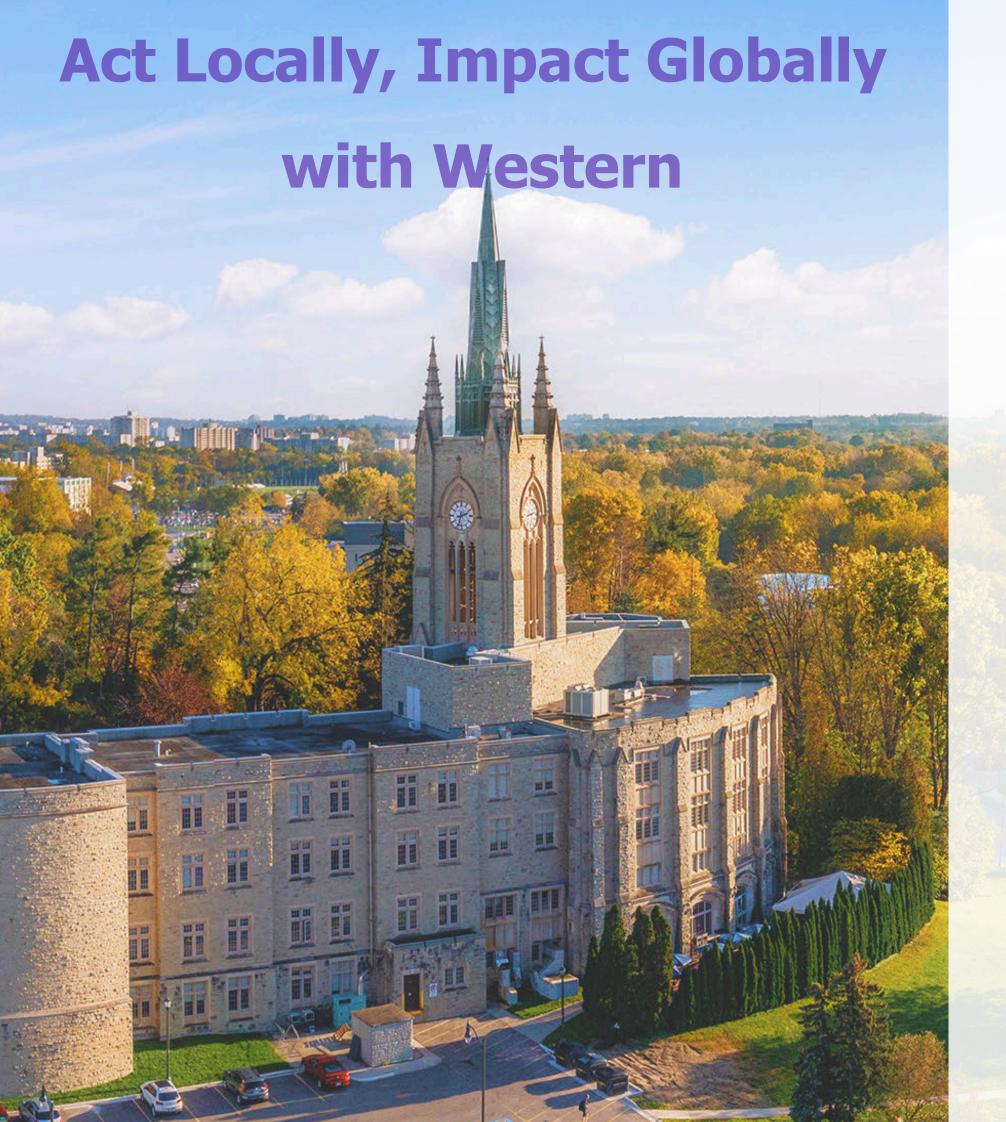


Western University Sustainable Development Goals







Land Acknowledgement

Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous Peoples (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.

Sustainability Commitment

At Western University, we are dedicated to sustainability across economic, social, and environmental dimensions. Our approach evolves with current research, trends, and societal shifts. We use the United Nations Sustainable Development Goals (UN SDGs) as guiding principles to tackle some of the world's most pressing challenges. Recognizing the interconnectedness of these 17 SDGs, we employ interdisciplinary methods to drive meaningful change.

About This Report

This report demonstrates Western University's efforts in promoting sustainability through all 17 UN SDGs. It outlines our initiatives in research, teaching, outreach, and operations, primarily reflecting activities and accomplishments from 2023, that underscore our commitment to building a sustainable future.

Towards Western at 150

Western University has a remarkable history and is eagerly preparing for its 150th anniversary in 2028: <u>Towards Western at 150</u>. Its mission is to nurture visionary leaders who can address today's challenges for the betterment of society. Our overarching themes for this roadmap are (1) Greater Impact; (2) People, Community, and Culture; and (3) Western's Place in the World. Under these overarching themes lies a strong commitment to sustainability and environmental stewardship, which reflect Western's dedication to sustainable practices.





Dr Alan Shepard, President & Vice-Chancellor

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United Nations Sustainable Development Goals

In 2015, the United Nations and its member states signed the 2030 Agenda for Sustainable Development—a call to action to meet some of the most pressing challenges facing our world. The specific challenges and objectives are defined in the 17 Sustainable Development Goals (SDGs), which offer states and non-state actors a plan for promoting and achieving sustainability in areas such as the environment, access to food, gender equality, and healthy and safe communities. Canada was one of 193 UN member states that adopted the 2030 Agenda for Sustainable Development, and it is committed to implementing the SDGs both in Canada and internationally.



<u>Ivey's Network for Business Sustainability</u> co-hosted a <u>Systems Change for Sustainability</u> <u>workshop</u> with the <u>MIT Sloan Sustainability Initiative</u> during the <u>UN Responsible Management Education Week</u>, fostering collaboration and equipping participants with tools for change.

The 17 SDGs





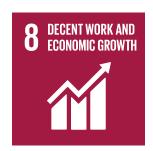
































Sustainability at Western

Western integrates the three essential pillars of sustainability—environmental, social, and economic into our research, teaching, outreach, and operations. Environmentally we promote research in climate and renewable energy, and embed SDG knowledge in our teaching. Socially we promote new programs and partnerships to provide communityengaged learning opportunities. Economically we support entrepreneurship, and offer programs with work experience placements.

66 We will model sustainable processes in our own operations and apply our research, teaching, learning, and community engagement to support London and Southwestern Ontario in our collective efforts to become the Canadian centre of gravity for sustainability thought leadership and the application of innovative sustainable practices.





Research

Our research initiatives encompass publications, research centres, and projects, all aimed at advancing knowledge and innovating solutions for the 17 Sustainable Development Goals (SDGs). These efforts enrich our educational offerings, ensuring our courses reflect the latest scientific and socioeconomic developments.



Teaching

By integrating cutting-edge research findings into our curricula, we equip students and staff with the knowledge and skills essential for sustainable development. This approach not only educates but also empowers our university community to actively participate in meaningful outreach activities.



Outreach

Through outreach, we extend our educational impact into the community, driving sustainable practices and garnering feedback that informs our operational strategies.



Operations

Incorporating feedback from our community engagement, we enhance the sustainability of our campus management, services, and support systems for students, staff, and community members. This improvement in operations not only supports our environmental goals but also strengthens our social and economic contributions, creating a feedback loop that enhances our research and teaching.



End poverty in all its forms everywhere



7th in the world for No Poverty

grants supporting research for lowincome communities



192 relevant publications 2018-2023

Research

London Poverty Research Centre

Addressing the root causes of poverty specific to London, ON, the London Poverty Research Centre works towards addressing inequality and social exclusion in our community. The Centre approaches poverty reduction by focusing on three steps: research, knowledge mobilization, and community action. Faculty and students learn more about local and broader poverty reduction initiatives by collaborating with 20 local organizations.

Homes4Women

Through collaborative research and evaluation, the Centre for Research on Health Equity and Social Inclusion at Western partnered with the community pilot project Homes4Women in London, Ontario. The project provided housing for women experiencing homelessness and offered insights into the specific barriers they face in accessing adequate housing.



I'd say the political will in London is growing for addressing issue of inequality and social exclusion. These are issues that affect people across the socioeconomic status. -Michael Courey



○ S CRHESI

The Centre for Research on Health Equity and Social Inclusion unites community forces to promote health equity and social inclusion through collaborative research and action focused on vulnerable and marginalized populations.

Teaching

Ivey's 39 Country Initiative

The <u>39 Country Initiative</u> is housed in the International Business Institute at the Ivey Business School, which has helped the world's most under-resourced countries advance their management education by decades. The initiative aims to provide current, relevant teaching materials and pedagogical skills development to higher educators in low-income countries, with the goal of improving the quality of education.

Also associated with:





registered professors



books, journals, and cases shipped



100,000 + reached

students





Anti-Poverty Education Course

The Master of Professional Education program offers an Anti-Poverty Education Course that delves into the significant impact of poverty on educational access and academic achievement. It addresses broader themes of social class and economic disparities, providing a framework to understand class privilege and its effects on teaching and learning. Students engage with organizations that assist economically disadvantaged groups and explore partnerships with community initiatives aimed at alleviating poverty.

Also associated with:





Financial Literacy Workshop Series

Money Talks @ Western U program delivers free workshops on financial literacy aimed at empowering students with essential money management skills. These workshops cover crucial areas like budgeting, banking, credit usage, and planning for educational expenses and life after graduation. The program seeks to instill responsible financial behaviours that prevent economic hardship and stress, providing students with the tools to navigate their financial future. The importance of financial literacy is especially highlighted by granting recognition for this program on the Western co-curricular record.











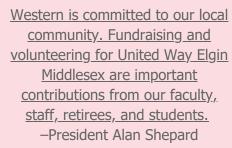
From poverty to <u>perseverance</u> embracing my past to advocate for others

-Demo Kaltabanis

Demo Kaltabanis grew up in a low-income household in Markham. At Western he realized his socioeconomic status had once caused him to make false, limiting assumptions about his academic abilities, outcomes, and future.

Now a graduate of the nursing program and pursuing further studies with aspirations for medical school, Kaltabanis advocates for students in similar circumstances, sharing his story at a <u>TEDx WesternU</u> to encourage students facing similar challenges.

(\Rightarrow) **Western United Way Campaign**



Western's United Way campaign aims to strengthen communities through donations and volunteerism. In 2023, it raised over \$619,000 for United Way Elgin Middlesex, becoming one of the largest university campaigns nationally and the top contributor in the region.

By the **Numbers**

\$614,016

donated through Western's 2023 employee and retiree giving campaign

39 social agencies

funded this year by United Way Elgin Middlesex

44 programs

offered by those agencies received grant money

Purple Hands

Purple Hands is a homeless advocacy organization run by students at Western University. They organize annual events such as Purple Hands Winter Outreach, World Homeless Action Day, and <u>Halloween For Hunger</u> to support the homeless by distributing essential items and collecting food for donation to food banks.

Our Impact







pieces of clothing

donated

Operations

Our actions in numbers

Tuition shouldn't be a barrier to your success. -Marisa Modeski, Registrar

Western University Financial Aid Overview 2023-24

Actions Amount

\$500K

for unexpected financial emergencies among graduate students

Details



1

Bursary Program

Graduate

Emergency Fund

\$2.8M

needs-based aid for both undergraduate and graduate students



Student Support **Programs**

\$41.7M

includes scholarships and extensive needs-based awards

Youth in Extended Society Care Program

Western University provides educational access to those who grew up in foster care through the Youth in Extended Society Care program. The support includes covering full tuition costs, ancillary fees, as well as books and supplies. This financial support is meant to recognize the unique circumstances and needs of youth in the Extended Care Society who enroll in postsecondary studies at our institution.

Bursaries and Work Study

Western University has multiple bursaries, including:

- The <u>Bursary Program</u> supports students from low-income families by helping them overcome financial and food insecurity for academic success. It covers expenses like tuition, housing, and textbooks.
- The Work Study program provides parttime on-campus jobs that equip students with valuable work experience and training, supporting both their studies and university staff.
- Ontario Student Assistance Program (OSAP) offers financial aid through grants and loans to college and university students.



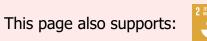








volunteers







End hunger, achieve food security and improved nutrition, and promote sustainable agriculture



48%

plant-based Chef's Table buffet menu 45,213

apples served in campus dining halls in 2023

252

relevant publications 2018-2023

undergraduate courses related to SDG 2

Research

Advancing Regenerative Agriculture in Canada

Envision a future where Canadian farms thrive while restoring ecosystems and combating climate change. Dr Diane-Laure Arjaliès and the <u>Ivey Sustainable</u> Finance Lab team at Western University present a compelling report on regenerative agriculture, highlighting sustainable practices that enhance biodiversity and mitigate environmental impacts. Discover innovative financial strategies and collaborative efforts crucial for this green transition, with actionable insights for policymakers, farmers, and stakeholders.

Also associated with:





Sustainable Aquaculture

Dr Bryan Neff is leading efforts to address the global food gap exacerbated by human population growth. His team is addressing this shortage of animal protein by focusing on sustainable aquaculture. They research green technologies aimed at reducing the environmental impacts of fish farming, promoting more sustainable fishing practices. Their work includes developing genetically enhanced Chinook salmon with increased growth rates and disease resistance, which led to the establishment of Canada's first organic fish farm.

Also associated with:



Teaching

Nutrition Education

The undergraduate Foods and Nutrition program at Western University delves into nutrition's critical role in society, encompassing food science, health determinants, and cultural influences. The program features specialized modules such as **Nutrition and Dietetics and covers** topics like Nutrition Care, Community Nutrition, and Sustainable Food Systems. This comprehensive educational approach equips students to contribute positively to societal health, addressing issues like disease prevention and community well-being through informed dietary and nutritional practices.

Regenerator: An Impact-driven Program

The 16-week accelerator program is dedicated to agri-food start-ups committed to sustainability and systemic change. In partnership with the Morrissette Institute for Entrepreneurship and the Centre for Building Sustainable Value, it offers hands-on mentorship and educational training focused on decarbonization, biodiversity conservation, and bio-circularity. Designed to embed best practices into actionable strategies, the program empowers entrepreneurs to accelerate their ventures and contribute significantly to the global sustainability goals. The Regenerator program will deliver live modules on key sustainability topics and fund 8 agri-food ventures for a 4-month intensive program.

Also associated with:









FRESH at Western

FRESH (Food Resources and Education for Student Health) is a nutrition education program developed by graduate students enrolled in the Master of Science in Food and Nutrition program. It aims to enhance nutritional awareness and skills among university students, focusing on improving the campus food environment and providing experiential learning opportunities. Through this initiative, graduate students lead efforts to educate their peers about nutrition and healthy eating practices.

Also associated with:









Olivia D'Andrea Brooks and Rubiga Thanganathan

Western Community Garden

The <u>community garden</u> was built by Western's **Sustainability Office**, Society of Graduate Students, and EnviroUSC to engage in sustainable gardening practices. The garden includes 38 raised-bed, repurposed concrete planters for growing food crops, 21 perimeter planters with native plants for biodiversity, and a central in-ground pollinator garden tended by faculty and students for the <u>Campus as a Living Lab program</u>.

Addressing Food Insecurity

The University Students' Council (USC) at Western addressed food insecurity by reducing stigma, sharing support resources, and promoting sustainable food practices. In celebration of World Food <u>Day</u>, Mariana Batista, USC Vice-President of University Affairs, led the initiative which highlighted ongoing challenges in food access and affordability. Activities included providing free food, student discounts, and recipe cards from Food Support Services (FSS). FSS also launched a customizable hamper system, allowing students to pick up essential food items.



Farmers' Market

Hospitality Services at Western has been hosting a weekly Farmers' Market since 2014 as a symbol of true food celebration where Western's community is encouraged to connect with local farmers. Students, faculty, and staff at Western can purchase the region's finest farm-fresh produce and locally made goodies like honey, jams, and baked goods.



Operations



Hospitality Services

Western <u>Hospitality Services</u> is dedicated to fostering a healthy and sustainable food system on campus. They focus on aligning and assessing current initiatives with the UN SDGs. Additionally, they partner with organizations like MealCare, Food Support Services, and Ark Aid Mission to enhance food recovery processes, ensuring more efficient use and distribution of resources within the campus community.

Also associated with:



Food Support Services

Food Support Services, managed by the University Students' Council, is committed to alleviating food insecurity among students, staff, and the wider community. This service raises awareness on food insecurity, hunger, and poverty, both locally and globally. It offers an anonymous food hamper program where students can complete a request form to receive a grocery bag. A walk-in food bank is accessible during business hours.

Also associated with:



WesternEats

The WesternEats app enhances the campus dining experience at the university by allowing students and staff to order meals in advance, skip dining queues, and access special discounts. Integrated with both campus and residence meal plans, the app ensures that everyone can conveniently manage their dining needs. By facilitating an efficient and user-friendly ordering system, WesternEats caters to the busy schedules of the university community, offering a practical solution for on-the-go eating.

Also associated with:



GOOD HEALTH AND WELL-BEING



Ensure healthy lives and promote wellbeing for all at all ages



Research

ALS Protein Interaction Discovery

Research spearheaded by Dr Michael Strong at the Schulich School of Medicine & Dentistry has led to a groundbreaking discovery in ALS treatment. Their research identified a protein interaction that could potentially reverse ALS progression, significantly advancing medical research in neurodegenerative diseases. Supported by a \$10 million grant from the Temerty Foundation, this finding highlights Western's leadership in health innovation.



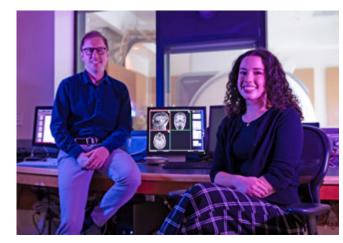
Researchers from Western University, Stanford University, and the University of California, San Francisco are advancing Alzheimer's treatment by targeting the P75 neurotrophin receptor. Findings published in **Nature Medicine** highlight promising results from initial human trials on patients with mild to moderate Alzheimer's. Further studies at Western's Centre for Functional and Metabolic Mapping at Robarts use advanced brain imaging and animal models to refine this treatment, potentially transforming patient care and outcomes.

Also associated with:





Dr Michael Strong



Professor Taylor Schmitz and PhD candidate Hayley **Shanks**

Marking a Canadian first: Robotic-assisted **Spinal Surgery**

A surgical team at London Health Sciences Centre, affiliated with Schulich School of Medicine & Dentistry at Western, has performed Canada's first robotic-assisted spinal surgery. Using a new, minimally invasive technology, this procedure enhances surgical precision and improves patient recovery outcomes, setting a new benchmark in medical treatment and innovation.

Also associated with:





Teaching

Community Service Learning

The Community Service Learning program offers undergraduate dental students opportunities for community service and engagement. They provide services at placements in local clinics and community sites in Southwestern Ontario. The program aims to provide person-centred and trauma-informed oral health treatment to equity-seeking community members.

Also associated with:





Advanced Health Care Master's: Diverse Specializations

The Advanced Health Care Practice master's program at Western is a unique, one-year, course-based initiative designed for seasoned health care professionals seeking graduate-level education in specialized fields.

The program offers eight distinct fields of study:

- Clinical epidemiology and research management
- Sport and exercise medicine
- Upper extremity rehabilitation
- Comprehensive musculoskeletal physiotherapy
- Wound healing
- Interdisciplinary pain management
- Health equity and sustainability
- Applied health sciences



6,179

relevant **publications** 2018-2023

3,017

graduates in health professions in 2024

Global Health Systems

The Global Health Systems program is a one-year professional master's degree focusing on international health, particularly in marginalized populations. Students have the opportunity to discuss solutions to issues in lowor middle-income countries while gaining the knowledge and skills to become leaders in this growing and dynamic field.

Also associated with:







17 18

Advocating for Equitable Infant Hearing Health Services in Canada



Marlene Bagatto, AuD, PhD

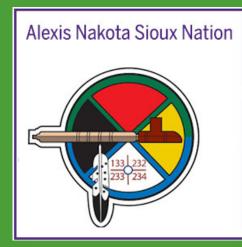
A postal code should not determine whether or not an infant has access to infant hearing health services.

Marlene Bagatto and the Canadian Infant Hearing Task Force (CIHTF) assessed infant hearing health services across Canada, highlighting significant disparities.

Their 2024 report card showed many regions lacked sufficient services, impacting child development. Bagatto joined CIHTF members in Ottawa to present their findings to federal officials, advocating for national guidelines to standardize early hearing detection and intervention programs, ensuring equitable access to quality services for all Canadian infants.

→ Enhancing Youth Mental Health

In partnership with Alexis Nakota Sioux Nation in Alberta, the Centre for School Mental Health is enhancing the Healthy Relationships Program – Enhanced to be culturally relevant for the Nakota community. The project integrates traditional Nakota teachings on well-being. It is led by a team that includes Elders, community knowledge holders, and an Indigenous educator. This initiative aims to counteract health inequities among First Nations' youth. This includes a pilot program for grade 10 students aiming to address inequities exacerbated by the COVID-19 pandemic.



Peer Support Centre

The Peer Support Centre is a studentled initiative that aims to provide nonjudgmental and confidential support from trained peers. The Centre fosters openness and understanding through providing a listening ear when needed. It includes support for accessing and finding services, such as emotional, mental, social, and financial. All volunteers are trained by mental health professionals in the model of peerbased support.

→ Canadian Centre for **Activity and Aging**

The CCAA is a unique national research and education centre within the Faculty of Health Sciences at Western promoting physical activity and well-being for older adults. Its education and leadership training programs instruct thousands of individuals across Canada through exercise classes, conferences, certifications, and more to enhance the functional fitness of older adults at every level of mobility.

Operations

→ Wellness Support

Health & Wellness Services offers free, confidential services to help students achieve personal, social, and academic goals. Services include consultations, referrals, therapy, workshops, and group sessions. Centralizing all services supports a holistic care model with a single intake for medical and counseling services and wellness education. The newly renovated Thames Hall features a central atrium adorned with a living wall. With plenty of natural lights, the study space is infused with beautiful scenery and nature sounds.

Also associated with:





PurpleCare

PurpleCARE enhances student well-being through essential health services:

- My Virtual Doctor: Ensures 24/7 access to virtual healthcare across Canada, featuring multilingual support, quick consultations, and comprehensive medical services such as diagnosis, prescriptions, and specialist referrals.
- My Student Plan: Offers coverage for prescription drugs, vision, dental care, and mental health counselling, supplementing provincial health insurance.
- My Wellness Plan: Provides immediate online support for mental health challenges, including assessments, video counselling, and balancing tools.

PurpleCARE is committed to providing affordable and accessible health and wellness coverage to help students thrive both academically and personally.

Also associated with:







Western's Trans Care Team

Recognizing the unique needs of genderdiverse students, the Trans Care Team consists of clinicians from both the mental and physical health support teams at Health & Wellness. Together, they provide specialized psychological counselling and medical care in a <u>2SLGBTQIA+ affirmative</u> environment.

Also associated with:







Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Research

21

Research on Disability Inclusion in Primary Education

> Drs Monique Somma and John Freer from Western University, in collaboration with local partners, conducted a study with Niagara Catholic District School Board students. This research aimed to promote positive attitudes towards disability and inclusivity in primary students. Teachers and students learned about disability and diversity and participated in sledge hockey with ParaSport athletes. The research findings have been presented at conferences and featured in the ParaSport Magazine Summer 2023 Issue.

Undergraduate Summer Research Internships

The <u>Undergraduate Summer Research Internships</u> program offers undergraduate students hands-on research experiences under faculty mentorship. The program enhances students' technical, professional, and research skills, supporting their academic and career development. Faculty mentors benefit from engagement and assistance with their research projects. The program includes professional development opportunities and culminates in a virtual exhibition event where students share their research with the broader community.

Canadian Research Centre on Inclusive Education

Western University collaborates with the Canadian Research Centre on Inclusive **Education**. This partnership focuses on improving educational practices and outcomes for all students, particularly the most vulnerable. The research covers inclusive education, policy, programming, training and implementation. It brings together researchers, educators, parents and advocates in support of the education of students with a disability, or other underrepresented learning groups.

This page also supports:





Teaching

Breaking Down Barriers in Education

The Faculty of Education has launched OpenEdu, an online hub for open educational resources. This initiative is designed to break down barriers to accessing educational programs and materials. OpenEdu offers a diverse array of resources addressing pressing issues in education and beyond. Resources focus on connecting to program and course learning outcomes to shape teaching strategies, assessment methods, and course content.

Centre for Teaching and Learning

The CTL is the university's teaching hub, supporting our educational mission through orientation, training, mentorship, research, and innovation for instructors at Western. Nationally and internationally recognized, the Centre offers programs for teaching assistants and international graduate students, as well as extended teaching certificate programs; and is the home of The Canadian Journal for the Scholarship of Teaching and Learning.



Inclusive Education Research Award

The Inclusive Education Research Award, sponsored by Foundation Western and managed by the Canadian Research Centre on Inclusive Education, offers three \$750 awards annually to Western's Faculty of Education graduate students. Recipients are researching inclusivity in education for their thesis or dissertation.



635 relevant publications 2018-2023

93%

students continued to their second year in 2023-24

Western Continuing Studies

Western Continuing Studies provides opportunities for everyone to keep learning at Western. From recent graduates, job seekers, and corporate clients, there is an array of choices for lifelong learning from a variety of programs, courses, and professional certificates.

The Online Teacher

The "Transition to Online Teaching with Confidence" program equips educators with key online teaching skills through courses like Differentiation and Equity, Creating Supportive Online Environments, and Online Engagement and Classroom Management. The program connects educators with expert Ontario teachers to refine their online teaching methods.





→ Indigenous Student STEM Access Program

The Indigenous Student STEM Access
Program at Western provides an inclusive pathway for Indigenous students—First
Nation (status and non-status), Métis, and Inuit—to pursue degrees in
Engineering or Science. This one-year program bridges high school and university, offering prerequisite courses and personalized support through academic advisors and success teams.
Entrance scholarships are available to enhance accessibility, ensuring a smooth transition and academic success.



→ Community Engagement Club Breaks Educational Barriers for Youth

The Community Engagement Club at Ivey Business School expands access to business education for underserved youth in London. Using the case method to teach core business concepts, Ivey students take on the role of instructors in monthly sessions designed for interactive and practical learning.

These sessions are organized to accommodate flexible scheduling and ensure effective educational outcomes. It serves as a model for community-based education, broadening access to those outside the traditional business school demographic and enhancing the teaching skills of HBA instructors through focused training workshops.

→ Let's Chat... about Inclusive Education

Let's Chat... about Inclusive Education is a webcast series produced by Inclusive Education Canada (IEC). Hosted by Gordon L. Porter, Director of IEC, with co-hosts Diane Richler, Chair of the Catalyst for Inclusive Education Initiative, Inclusion International, and Jacqueline Specht, Professor of Education and Director of the Canadian Research Centre on Inclusive Education at Western University, the series features researchers, educators, parents, and advocates. The webcast provides diverse perspectives on the challenges, progress, and issues related to inclusive education in Canada. Supported by Western University and funded by the Social Sciences and Humanities Research Council of Canada, all episodes are free and publicly available online.

Operations

Western Libraries and Open Access

With more than 12 million items—both in print and online—Western Libraries houses one of the largest collections in North America. The general public is welcome to visit Western Libraries and make use of most collections.

McIntosh Gallery

Founded in 1942, McIntosh Gallery at Western University is a public art gallery that promotes visual arts education. It engages with artists, academics, and the community through innovative exhibitions and educational programs. Supported by various arts councils and Western University, the gallery provides enriching visual culture experiences, offering free educational opportunities for all.





Writing Support Centre

The Writing Support Centre is available year-round to assist with universitylevel writing. It offers free one-to-one appointments, writing seminars, resources, and presentation help with a writing advisor. Services are available in-person at two campus locations or online. The Writing Support Centre supports all members of Western's community, including undergraduates, graduate students, postdocs, and faculty. Assistance is provided for any academic or professional writing, at any stage of the writing process, in any genre, across disciplines. Additionally, the Centre offers free online modules publicly accessible to introduce university-level writing.







Achieve gender equality and empower all women and girls



Research

Western Professor among Top Canadian Women in Science

Western Engineering professor Martha Dagnew has been named to the 3M 25 Women in Science Program, the first time the program has recognized recipients in Canada. As a leader in civil and environmental engineering, Dagnew's groundbreaking research on protecting water sources from climate change, urbanization, and industrial contaminants is transforming environmental sustainability. Her innovative solutions minimize greenhouse gas emissions, energy use, and physical footprint, making water treatment more sustainable. This recognition underscores the crucial role of women in STEM and inspires future generations of women engineers, promoting diversity and representation in science.

Also associated with:







Sexuality and Gender **Research Group**

The Sexuality and Gender Research **Group** brings together researchers from the Faculty of Arts and Humanities with scholars in other disciplines to discuss questions of sexuality and gender. Every year, the group hosts several academic talks as well as Queer Research Day every April, a full-day event involving both papers and poster presentations.

Also associated with:





Teaching

Linamar Scholarship



The Linamar Scholarships at Western will support up to 10 female students in the dual degree program in Engineering and Business (BESc/HBA). The scholarship includes half of the tuition for all years of the dual degree program, summer co-op, and guaranteed employment.

Also associated with:







relevant publications 2018-2023

SDG 5





Women-only Training for Advanced Machining

In 2024, Western's Faculty of Engineering has launched a women-only Advanced Machine Shop Training course, aimed at increasing female participation and addressing gender disparities in engineering. This program, championed by <u>Stephanie Tigert</u>, provides hands-on technical training in a supportive environment, aligning with the faculty's commitment to inclusivity and empowerment.

Also associated with:





The 2024 WAM cohort at Ivey



Women in Asset Management

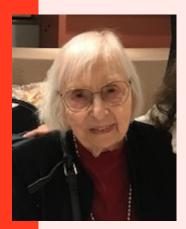
Ivey Business School's Women in Asset Management program aims to boost female presence in Canada's asset management industry. This tuition-free program, subsidized by corporate sponsors, offers a combination of in-class training and a subsequent internship, designed for second-year female university students across Canada.

Also associated with:





Celebrating Women Pioneers in Medicine at Schulich



Dr Marie Jeanne Ferrari, BA'55, MD'59

On International Women's Day 2024, the Schulich School of Medicine & Dentistry honors pioneering women like Dr Marie Jeanne Ferrari, one of its oldest living alumni, who broke barriers to pursue careers in the male-dominated field of medicine. The celebration highlights past achievements and features current female medical students forging new paths. By recognizing these contributions, the event promotes gender equality and inspires future generations of women in medicine. This celebration underscores the progress made and the ongoing efforts needed to achieve gender parity in the medical field.

Western Students Elevate Youth Voices at UN Commission on the Status of Women

Western graduate Ziyana Kotadia and student Aisha Imana are part of the Canadian delegation at the 68th session of the United Nations Commission on the Status of Women in March 2024. Selected by Young Diplomats of Canada, they advocate for gender justice, inspired by their experiences at Western. They engage in highlevel meetings, present policy recommendations, and emphasize the importance of youth voices in global gender equality discussions.



Ziyana Kotadia

Aisha Imana



Girls in Engineering

Go ENG Girl and Go CODE Girl are some of the community outreach programs offered by Western Engineering that provide interactive and exciting opportunities for girls in grades 7-11 to be introduced to engineering, coding, and related STEM fields. Girls learn about the world of engineering from female professionals, academics, and students.

Operations

Trans Affirm: Supporting **Gender Diversity in Education**

Trans Affirm at Western is dedicated to creating a supportive and inclusive environment for trans and gender-diverse students. It offers comprehensive resources, including academic publications, toolkits, and vetted external materials, to meet the specific needs of these students. By implementing inclusive policies and practices, Trans Affirm aims to eliminate discrimination and promote gender equality within educational settings. The program's core mission is to empower trans and genderdiverse students through ongoing support and the integration of affirming practices in the university's operations.

Also associated with:





Centre for Research & **Education on Violence Against** Women & Children

The CREVAWC was established in 1992 following a national study on violence against women, prompted by the 1989 École Polytechnique de Montréal tragedy. CREVAWC conducts research to address systemic barriers to the safety of women and children, reflecting Western's commitment to public service and knowledge advancement. With extensive partnerships within the university and beyond, the Centre tackles communitybased issues and generates impactful research. Its mission focuses on disrupting cycles of gender-based violence in homes, workplaces, and communities.

Also associated with:







Gender-Based & Sexual Violence Action Committee

The Gender-Based & Sexual Violence Action Committee at Western aims to transform campus culture by addressing and preventing gender-based and sexual violence. The committee makes strategic recommendations to foster a safer and more inclusive environment. Western University values respect and diversity, providing a range of services under Wellness & Well-being to prevent harm, respond to reports, and support those affected by genderbased and sexual violence, ensuring a supportive campus community.

Also associated with:









CLEAN WATER AND SANITATION



Ensure availability and sustainable management of water and sanitation for all



Research

WesternWater Centre

The WesternWater Centre focuses on innovative solutions for managing and treating water supplies amid escalating global demands. This Engineering-based group, collaborating with industry partners and students, addresses challenges such as energy recovery, phosphorus and organics extraction, plastics removal, and industrial wastewater recycling, creating real-world solutions and reclaiming resources from waste.





Photo Credit: Shuyang Wang

Research for Subsurface Transport and Remediation

RESTORE (Research for Subsurface Transport and Remediation) conducts innovative research aimed at addressing the sustainable management of our water resources through the development of engineering technologies in addition to enhancing understanding of natural hydrogeologic systems. Key research areas include soil and groundwater contamination and remediation, surface-groundwater interactions, and green roof technology.

Teaching

Water Resource Management Courses

The Department of Civil & **Environmental Engineering offers a** range of courses in drinking water treatment at both undergraduate and graduate levels. Key specialized courses include:

- Watershed Modelling
- Environmental Assessment Process for Water Resources
- Environmental Water Chemistry
- Modeling and Simulation of Wastewater Processes
- Water Quality and Treatment
- Groundwater Flow and Contaminant Transport

Master of Environment and Sustainability

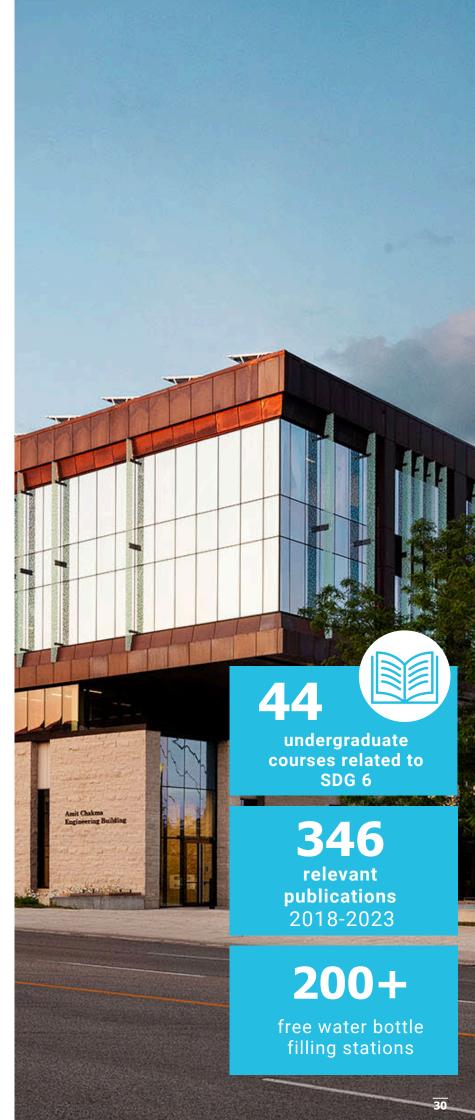
As part of the Master of **Environment and** Sustainability (MES) program, the Engineering Solutions course equips students with critical skills in wastewater treatment and water pollution control. Through practical exercises and case studies, students learn to apply advanced strategies for managing pollution and treating waste-water.

This page is also associated with:











WaterAid club leaders Megan Somerville (left) and Elline Zhuge (right)

CEMS Students at Ivey Explore Clean Water Solutions

During a visit to Trojan Technologies, CEMS Masters in International Management exchange students at Ivey Business School explored how local innovations tackle global water issues. Part of their Global Leadership course, the visit showcased Trojan's UV water treatment solutions and their worldwide applications, highlighting the significant role of local businesses in resolving global water safety challenges.

Water Purification Startup

<u>Ivey student Shirley Zhong</u> co-founded Xatoms, a water purification startup that recently won \$500,000 at Startupfest 2024. The company, which uses quantum chemistry and AI to purify water, will compete in the Hult Prize Global Accelerator and Finals in London, U.K. Zhong, inspired by her role in the Western Hult Prize Competition, teamed up with two University of Toronto students to launch Xatoms. With support from Ivey's faculty and resources, the team is now preparing to bring their innovative solution to global markets, starting with potential pilot projects in Kenya.

WaterAid

WaterAid Western aims to fundraise and bring awareness to make clean drinking water, reliable toilets, and good hygiene accessible to everyone. Having previously won Student Chapter of the Year in Ontario, Western Water Chapter also gives students the opportunity to explore the water industry.

Enhancing Water Security Through Collaborative Efforts

Western University and the University of Guelph emphasize the impact of collaborative water-sharing agreements on improving water quality for First Nations communities. Their research highlights the initiative linking the Oneida Nation of the Thames with the Lake Huron Primary Water Supply System, showcasing how strong communication and coordination can secure sustainable water access and resolve long-standing advisories.



The co-founders of Xatoms, a water purification startup, (L to R) Diana Virgovicova, HBA student Shirley Zhong, and Kerem Topal Ismail Oglou at the Hult Prize Lisbon Summit

Operations

Refill. Rehydrate. Repeat.

Western University has stopped selling plastic bottled water, offering over 200 free water bottle filling stations instead. Plastic bottles are no longer available at university events, vending machines, or eateries. This policy aligns with the UN SDGs, promoting accessible drinking water and sustainability through reduced plastic consumption and enhanced energy efficiency.

Also associated with:





Rain Infiltration Garden

The Rain Infiltration Garden is a low-impact development system located by the Physics and Astronomy Building. It is Western's first naturalized rain garden, featuring lowmaintenance native plants that help rainwater infiltrate into the ground, rather than flow as storm water runoff, into the sewer system. The garden promotes biodiversity with native plants and enhances the pedestrian experience. Seating allows community members to enjoy the garden and wildlife.

Also associated with:







London Wastewater Facility and Water Efficiency Upgrades

Western wastewater is treated at the Greenway Pollution Control Plant, the largest facility in London, handling over 60% of the city's wastewater. This collaboration allows for full-scale testing and demonstration of new wastewater treatment technologies.

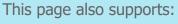
Water Efficiency Upgrades:

- Backflow Device Testing: 651 devices tested annually to protect drinking water.
- **Greywater System**: Reused 10 million liters of water since 2017 for various services, reducing municipal water usage.

Also associated with:























AFFORDABLE AND **CLEAN ENERGY**



Ensure access to affordable, reliable, sustainable, and modern energy for all



100%

renewable energy pledge 1,099

relevant publications 2018-2023

13

LEED® certified buildings

undergraduate courses related to SDG 7

Research

Collaborative Carbon Solutions

Carbon Solutions focuses on innovative strategies to reduce GHG emissions. This research-driven initiative, rooted in strong partnerships with academia and industry, addresses carbon reduction with a significant impact both nationally and internationally. Concentrated in Southwestern Ontario, the initiative develops solutions that enhance clean energy technologies and promote the circular economy. Funded projects explore and validate potential solutions through demonstration projects, prototypes, system testing, and more, while also identifying research opportunities in policy, education, and economic assessment to support Canada's sustainability goals.

Ivey Energy Policy and Management Centre

The Ivey Energy Policy and Management Centre aims to be an independent, informed, and trusted voice on Canadian energy policy. By producing and sharing evidence-based research, the Centre contributes to policy-making in the electricity, gas, oil, and pipeline sectors. It offers a <u>transparent forum for dialogue</u> among industry, government, academia, and stakeholders, while educating students, executives, and officials on energy issues. Guided by principles of independent analysis, transparent public discussion, and responsible resource use, the Centre supports the long-term growth of the Canadian economy and the wellbeing of Canadians.

Teaching

Sustainable Energy Innovation: Sunstang Solar Car Project

The Sunstang Solar Car Project is one of Western Engineering's largest and longest-running projects, which introduces undergraduate students to sustainable energy practices through projectbased learning.



This interdisciplinary team designs, prototypes, and assembles an eco-friendly solar car, integrating mechanical engineering with customized electrical systems. The team aims to compete in the Formula Sun Grand Prix in 2024 and the World Solar Challenge in 2025, demonstrating their commitment to innovative, sustainable engineering.

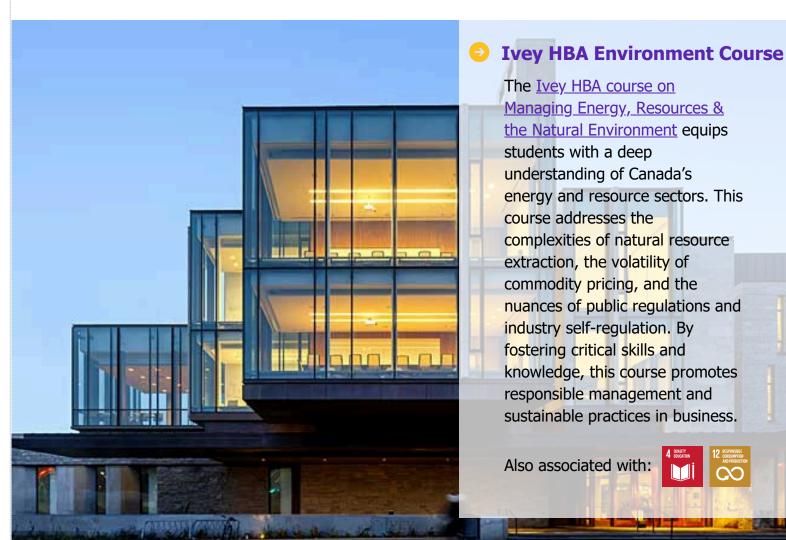
Also associated with:





















CleanTech Conference

Western University hosted its first <u>CleanTech conference</u> in November 2023. Uniting researchers, entrepreneurs, and industry leaders to pioneer advancements in renewable energy, sustainable materials, and environmental sciences. This event, part of the \$2million Carbon Solutions initiative, highlighted innovative projects such as turning forest waste into jet fuel and developing "digital twins" for building efficiency. Featuring panel discussions and a keynote by President Alan Shepard, the conference underscored Western's commitment to combating climate change and fostering collaboration for sustainable technological solutions.



→ Ivey's 7thAnnual Electricity Workshop on Policy and Markets

The Ivey Energy Policy and Management Centre hosted its 7th Annual Workshop on the Economics of Electricity Policy and Markets in October 2023 in Toronto. This event gathered scholars, practitioners, and industry leaders to discuss contemporary issues in electricity policy, regulation, and markets. The annual workshop aims to build a community of experts, expand research networks in Canada, and support academic research contributing to effective electricity policies and market designs. The theme centered on the future of electricity market design in Canada. Panelists explored the impacts of decarbonization policies and technological innovations in provinces such as Alberta, Nova Scotia, and Ontario.



Ergs and Podcast **Ergs and Equilibrium**

The <u>Ivey Energy Policy and</u> Management Centre, hosted by Brandon Schaufele, Associate Professor of Business, Economics, and Public Policy, offers a podcast series in collaboration with the Canadian Association for Energy Economics. These podcasts feature expert discussions on renewable energy, oil price forecasting, and energy market dynamics, providing valuable insights into the energy sector. This series supports informed decision-making and advances the goals of affordable and clean energy.

Operations

Transition to Electric Utility Vehicles: A Green Campus

In 2023, Western enhanced its sustainability efforts by transitioning to electric utility vehicles and landscape tools. Facilities Management has added two electric John Deere Gator utility vehicles, replacing a carbon-intensive truck, to improve comfort and efficiency for the grounds crew while reducing noise and emissions. The shift includes batterypowered handheld tools and an autonomous electric mower at the Ivey Business School. Additionally, four new electric vans joined the fleet, supported by newly installed EV charging stations. Committed to net-zero emissions by 2050, Western continues to explore sustainable solutions for a greener campus.



Sustainable Buildings

The <u>Deep Energy Retrofit Program</u> enhances energy efficiency and reduces carbon emissions by renovating older buildings, decommissioning obsolete systems, adopting right-sized equipment, transitioning from natural gas to electric heat pumps, and utilizing waste heat. With 13 LEEDcertified buildings, Western demonstrates its commitment to sustainability. Western is set to open its first carbon-neutral building, the Ronald D. Schmeichel Building for Entrepreneurship and Innovation. Additionally, Western's power plant will receive a \$16 million upgrade, funded partly by a \$4.75 million grant from Environment and Climate Change Canada, to install two electric boilers that will generate 40% of the university's steam and reduce campus emissions by 20%-30%, supporting Western's 2030 greenhouse gas reduction targets.

This page also supports:













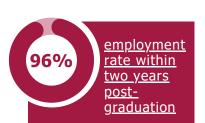


DECENT WORK AND



Promote sustained, inclusive and sustainable economic growth; full and productive employment; and decent work for all











students with work experience placements

Research

Centre for Human Capital and **Productivity**

The Centre for Human Capital and Productivity (CHCP), one of the eight governing research centres within the Network for Economic and Social Trends in the Faculty of Social Science at Western, focuses on studying and providing policy advice on human capital and productivity. The Centre publishes policy briefs to disseminate research findings to policymakers, journalists, and researchers. CHCP also sponsors conferences, seminars, and workshops on relevant topics.

Research Themes:

- Early Childhood, Primary, and Secondary Schooling
- Post-Secondary Education
- Productivity and Earnings
- Social Benefits of Human Capital
- Human Capital Policy
- Human Capital, Development, and Growth

Non-native Accents and Employment Impacts

In 2023, researchers from Western University explored the employment impacts of non-native accents on men and women. The findings show that women with nonnative accents encounter more significant barriers when seeking employment. The results suggest genderbased disparities affecting linguistic diversity. These pose longer-term issues for workers and industries, undermining gender equity. The journal article was published in the **Psychology** of Women Quarterly.

Teaching

Western Accelerator

The Western Accelerator is an immersive four-month program designed to cultivate an entrepreneurial mindset in students and support new high-potential ventures. Accepted founders receive mentorship, education, and \$12,000 in funding. By supporting alumni founders at every stage of their entrepreneurial journey, the program contributes to the growth of the entrepreneurial ecosystem.

Career Education at Western

Career Education helps past and present students design a meaningful life by exploring and connecting with opportunities, testing out future possibilities, and preparing for work in a changing world. The program partners with employers and the community to develop meaningful talent pipelines and, with the support of faculty, staff, and parents, cultivates a strong network for all students.



Work Integrated Learning

Work Integrated Learning (WIL) provides students with opportunities to apply their academic knowledge in practical workplace settings, enhancing their learning experience and career readiness. WIL programs are available in over 45 academic areas, providing industry partners with access to bright students in related academic fields. These programs, which include internships, co-ops, projects and practicums, ensure students develop valuable skills in communication, problem-solving, teamwork, and leadership.

Professional Programs at Western Science

Western Science offers four professional master's programs designed to build on technical skills from undergraduate science degrees while expanding expertise in management, communications, and leadership. These programs, which cater to careers in both industry and government, include the Master of Data Analytics, Master of **Environment and Sustainability**, Master of Management of Applied Science, and Master of Financial Economics. Each program incorporates a work term component, providing practical experience and enhancing employability.



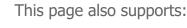






















Community Internship Program

The <u>Ivey Connects Community Internship</u> <u>Program</u> offers business students practical experience in the non-profit sector in Toronto and London, Ontario. HBA students collaborate with non-profit organizations (NPOs), applying strategic decision-making skills and gaining valuable industry insights. The program enhances student awareness of the community sector, supports NPOs with skilled interns, and fosters partnerships between academia and non-profits. Partners such as London Life and Great-West Life support the initiative by funding internships.

Hirewesternu Career Fair

The Hirewesternu Career Fair offers a valuable opportunity to meet employers with full-time, part-time, and work-integrated learning opportunities. Open to all programs, academic levels, and alumni, hirewesternu serves as a centralized pathway for recruiting and hiring students from Western University. This platform provides robust access to undergraduate, graduate, and post-degree students, and alumni, allowing employers to search for talent from all faculties at the main campus, two affiliated University Colleges, Western Continuing Studies, and Ivey Business School.

→ Research and Education on Violence Against **Women and Children**

The Centre for Research & Education on Violence Against Women & Children (CREVAWC) at Western addresses workplace harassment and violence through the Respect at Work initiative. It provides free online micro-learning modules, research reports, infographics, and leadership seminars. The center focuses on policy reform, developing prevention and intervention resources, and conducting original research. By collaborating with government, unions, and employers, CREVAWC aims to create safer and healthier work environments with evidence-based strategies.

Operations



Employee Assistance Program

The Telus Health Employee Assistance Program (EAP) at Western University is a confidential and voluntary support service for employees and their immediate family members, offering professional counselling, resources, and guidance to address personal and work-related challenges. Aiming to promote well-being, productivity, and a positive work environment. The EAP introduced online scheduling, making it easier to book virtual (phone or video) counselling appointments.

Commitment to Employment Equity

Western offers a competitive compensation package to attract and retain top talent. Committed to employment equity, pay equity, and <u>diversity</u>, Western welcomes applications from women, racialized groups, Indigenous persons, individuals with disabilities, and persons of any sexual orientation or gender identity. Accommodations are available for applicants with disabilities throughout the recruitment process. During peak academic times, Western employs over 12,000 people, including 1,408 full-time <u>faculty</u> and <u>2,461 full-time staff</u>. Recognized as one of Canada's Top 100 Employers for three consecutive years, Western ensures employment opportunities are open to all.

Western Award of Excellence

Western honours staff members who demonstrate exceptional commitment to the University's values with the Western Award of Excellence. This award fosters a culture of recognition, annually asking faculty, staff, students, and alumni to nominate individuals or teams. Additionally, the 25-Year Service Award celebrates long-serving faculty and staff, acknowledging their dedication and contributions to Western's reputation as a top Canadian researchintensive university.

Sustainable Global **Equity Fund**

The Sustainable Global Equity Fund was implemented after surveying Western pension plan members. It offers members an investment option aligned with the UN Sustainable Development Goals. Managed by Mirova, the fund emphasizes sustainable economic transformation and responsible investment. The initiative reflects Western's commitment to sustainability.

This page also supports:



















9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



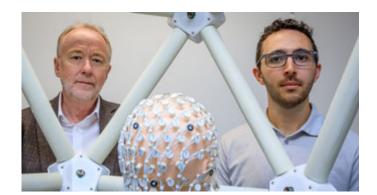
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Research

Western Neuroscientists Reveal Thoughts of Brain-Injured Patients

Neuroscientists Adrian Owen, Karnig Kazazian, and their colleagues at Western University, Lawson Health Research Institute, and Harvard University have made groundbreaking advancements in neuroimaging. Published in Lancet Neurology, their research uses fMRI, EEG, and fNIRS to detect conscious awareness in brain-injured ICU patients by analyzing brain activity patterns. This innovative approach aids clinical decision-making and resource allocation, enhancing patient care and prognosis while advancing our understanding of consciousness.



Adrian Owen and Karnig Kazazian

This page also supports:



Space Experts Test New Rover



Planetary geologists Livio Tornabene, Gordon Osinski, and their international team are testing the Enfys spectrometer for the ExoMars 2028 Rosalind Franklin <u>rover mission</u>. Supported by a three-year Canadian Space Agency grant, their research focuses on understanding clay formation on Mars, a key indicator of past habitability and potential extraterrestrial life. Enfys and PanCam will work together to detect and characterize Martian clays. The team conducts simulated Mars missions at three diverse field sites on Earth to refine these instruments, providing critical data for the upcoming mission and enhancing planetary exploration expertise in Canada.

Western University's 51 Firsts:A Legacy of Innovation

Western has a long history of impactful research in health, culture, environment, and economies, achieved through many partnerships including Robarts Research Institute, Lawson Health Research Institute, London Health Sciences Centre, and St. Joseph's Health Care London. From the discovery of insulin to advancements in HIV vaccine trials, Western has highlighted 51 significant firsts that mark groundbreaking contributions across various fields. This legacy of excellence is supported by local, national, and global partnerships, showcasing a commitment to addressing some of the world's most pressing challenges.

Teaching

Opportunities for Everyone to Keep Learning

Western Continuing Studies offers online innovation courses to equip leaders with skills to tackle current and future business challenges. These flexible courses teach creative problem-solving methods and tools to inspire innovation and build agility and resilience within teams. Participants can register for individual courses or pursue a certificate program for career advancement. The fully online format accommodates diverse lifestyles, making it convenient to continue learning and obtaining certifications.

Obligation Designing a Sustainable Future

Civil and Environmental Engineering students can specialize in International Development with a focus on Structural or Environmental Engineering. This specialization introduces them to the complex societal, environmental, political, and economic issues involved in building safer communities both in Canada and the developing world. The program includes a Summer Community Development Placement and Design Project, offering students a four-month opportunity to work in developing countries or underserved communities in Canada, applying their skills in real-world settings.

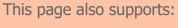


488
relevant
publications
2018-2023

52
university
spin-offs

Innovation Funding

- The Western Innovation
 Fund, supported by the
 Vice-President of Research,
 aims to transform
 innovative research into
 market-ready applications.
 Offering up to \$100,000 in
 funding, it helps bridge the
 gap between research and
 commercialization,
 fostering the development
 of new technologies and
 solutions.
- The John M. Thompson
 Innovation Fund supports
 Western Engineering
 students with promising
 ideas. This fund helps bring
 their concepts to life by
 providing financial backing
 and expert advice.













The Technology Club

The Technology Club is a student run organization dedicated to helping members navigate the broad technology industry and explore associated career opportunities. Workshops, seminars, and speaker sessions are organized to provide insights into emerging technologies and their business impacts. The Club fosters a network of likeminded individuals for collaboration, mentorship, and the exchange of innovative ideas. Additionally, it bridges the gap between technology and business, promoting interdisciplinary discussions and encouraging strategic decision-making and sustainable business practices through technology.

Innovation North: Co-Creating Solutions

Innovation North collaborates with business, non-profit, and government partners to co-create solutions to complex problems. Their Compass approach uses systems thinking and iterative processes. The <u>Innovation</u> North Studio develops future leaders' capacity to tackle challenges. In collaboration with Walmart Canada, the inaugural Systems Innovation Challenge involved over 185 Ontario students, addressing issues like product returns and the future of retail, with \$15,000 in prizes. The 2025 Challenge will expand to university students across Canada.

WORLDiscoveries

WORLDiscoveries, a leading commercialization centre, is a partnership between Western University, Robarts Research Institute, and Lawson Health Research Institute. Industry connections, market knowledge, and business development expertise are used to help researchers and inventors commercialize their discoveries through licensing and company spin-offs. As the business development arm of Western University, WORLDiscoveries collaborates with local and international partners to transfer innovative research products and services to the community, enhancing the impact of academic research.



Menka Ahlawat (front) from Schulich School of Business with teammates (L-R) Pallab Kumar Doley, Ashwin Vignesh Rajagopal, and Ankita Sharma.

Operations

Where Innovation Comes to Life

Western Discovery Park is one of Canada's leading science and technology parks, facilitating commercialization, partnership development, research translation, and entrepreneurial learning at Western. This 46-acre campus, adjacent to the university, offers over 200,000 square feet of office, lab, and industrial space. The Western Research Parks program also includes Western Advanced Manufacturing Park and Western Sarnia-Lambton Research Park, all serving as strong links between academics and commerce.

Net Zero Energy Farm

Joshua Pearce and the Free Appropriate Sustainability Technology (FAST) research group at Western developed a net zero energy farm to enhance yearround berry production. Located at the **Environmental Sciences Western Field** Station, the farm combines photovoltaic-shielded outdoor areas with an indoor Agrotunnel. Supported by the **Homegrown Innovation** Challenge grant, this project aims to create an energy-efficient farming system adaptable to extreme climate conditions. The Agrotunnel supports food security by producing fruits and vegetables locally year-round.

This page also supports:









Renewable Energy

Western invests in solar power through LEED-certified buildings and solar-powered LED lamps on campus. The Amit Chakma Engineering Building, one of three academic buildings in Canada to achieve LEED Platinum certification, features a solar array, grey water recovery, and electrochromatic windows. As a living laboratory for sustainable design, it incorporates locally sourced Canadian maple, Wiarton limestone, and regional steel. These elements reduce our carbon footprint and enhance the student experience on one of the country's most beautiful campuses.

Efficiency Upgrades at Western

Western has implemented several efficiency <u>upgrades</u> to reduce energy consumption on campus, such as:

- <u>Sustainable Design Guidelines:</u> Ensuring that all construction and renovation projects target efficient energy and water systems.
- Demand Management: Western employs strategies to manage electrical demand, enhancing infrastructure resilience and reducing usage during peak times.
- Electric Boilers: Currently in the design phase, two electric boilers are planned for installation. These boilers will replace an aging natural gas boiler, reducing campus emissions by 20%-30% and generating 40% of the university's steam.









NEQUALITIES



Reduce inequality within and among countries



Research

EDID & Indigenous Research Program

Western emphasizes the importance of equity, diversity, and inclusion in research teams for greater innovation and problemsolving. The program promotes equitable practices and supports Indigenous research and faculty, fostering a respectful and inclusive research environment. Western Research collaborates with the community to advance Indigenous research methods and data, working towards reconciliation, decolonization, and Indigenization.



Also associated with:







Enhancing Research on Social Inequality

The Centre for Research on Social <u>Inequality</u> (CRSI) within the **Network for Economic and Social** Trends in the Faculty of Social **Science** promotes and supports innovative research on social inequality through multidisciplinary collaboration on projects and grants. They share findings with academics, policymakers, and the public. CRSI provides mentoring to students interested in social inequality. Current projects include assessments of Canadian earnings, neighbourhoods, enrolment in schools, multicultural spaces, and LGBT employment discrimination.

Also associated with:





Teaching

Anti-Racism Foundations Certificate Program

The Anti-Racism Foundations Certificate <u>Program</u> educates participants on the history and dimensions of racism in Canada, focusing on Indigenous Peoples, Black People, and People of Colour. It covers systemic barriers such as biases, stereotypes, and microaggressions. The program builds skills to become anti-racist allies and implements strategies to use privilege and power for creating equitable environments. Graduates will recognize the impact of racism, address implicit bias, and co-create an inclusive environment.



EDI Workshops at Western

The Office of Equity, Diversity, and <u>Inclusion (EDI)</u> at Western offers various workshops for the campus community. These sessions aim to enhance awareness and equip participants with tools to practice allyship and understand EDI core values. Programs include Lunch & Learn workshops for staff and faculty, as well as student-only workshops. These encourage a deeper commitment to equity and



780 relevant publications 2018-2023

EDI workshops and modules offered at Western

Anti-Black Racism Education

As part of the Ontario Association of Deans of Education, the Faculty of Education has launched the Commitment to Anti-Black Racism Education and Black Inclusion in Ontario Higher **Education**. This initiative aims to dismantle anti-Black racist structures and promote Black scholarship, research, teaching, and learning. Guided by the Scarborough Charter's principles of Black flourishing, inclusive excellence, mutuality, and accountability, Western Education calls on educators, students, and community partners to address anti-Black racism and celebrate Black excellence year-round.

inclusion across the university.







→ Western Pride: Celebrating Diversity and Inclusion

Western celebrates Pride annually with various events on campus and virtually, in conjunction with the London Pride Festival. Key activities include Wortley Pride, Western Alumni Pride Month in Toronto, Out at the Atrium, SOGS Rainbow Coffee Club, and the London Pride Fest and Parade. These events honour the 2SLGBTQIA+community and allies, creating a sense of belonging and inclusion for all.



Also associated with:





Global Health Equity Hub

The GHE @ Western hub connects people dedicated to Global Health Equity through events, research activities, educational opportunities, partnerships, and student organizations. Supported by the Vice-President of Research Office, it provides a centralized platform for students, faculty, and community partners to access resources and get involved. The hub includes an archive of curated resources and a blog for reflections on the ethics and challenges of Global Health Equity work. This initiative underscores Western's commitment to addressing health inequities and promoting health equity globally and locally.

Also associated with:





→ Western Law Advocates for Accessible Air Travel



A disability rights advocate, David Lepofsky, visiting professor at Western Law, is helping champion accessible air travel. Lepofsky led a group of students to the House of Commons to address accessibility issues in air travel. This experiential learning trip allowed students to engage in the legislative process and propose solutions for improving air travel for people with disabilities. This initiative not only advocates for policy changes but also enriches students' practical skills and understanding of social advocacy in legal education.

Also associated with:







Operations

Office of Equity, Diversity and Inclusion

Western demonstrates its commitment to EDI by the establishment of the Office of Equity, Diversity and <u>Inclusion</u>. Supervised by an Associate Vice-President, this office holds the authority to influence decision-making processes. Its mission is to recognize, promote, and celebrate diverse voices on campus through a culture of openness to others. The office is currently developing Western's EDI Strategic Plan, as outlined in Towards Western at 150. The WIDE (Western Inclusion, Diversity, and Equity) Survey, currently underway, will inform processes, policies, and initiatives. The EDID Champion program and EDI Pulse Newsletter encourage the whole community to share knowledge and practices to promote equity, antiracism, and accountability.

Barrier-Free Accessibility

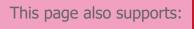


Western is dedicated to achieving barrier-free accessibility for persons with disabilities who study, visit, or work on campus. A variety of services, groups, and committees are devoted to promoting accessibility and ensuring equitable access to all services and facilities. Efforts include welcoming service animals, renovating older buildings for better accessibility, academic and exam accommodations, alternative format text, and assistive technology to provide the best experience for all community members.

Office of Indigenous Initiatives

Western's Office of Indigenous <u>Initiatives</u>, led by the Vice-Provost & Associate Vice-President (Indigenous Initiatives), drives systemic change for Truth and Reconciliation and equitable outcomes for Indigenous Peoples. It focuses on relationship-building with Indigenous communities and fostering an inclusive academic environment. Key areas include strategic planning, community engagement, policy development, curriculum and training, recruitment strategies, and research, all aimed at implementing Western's <u>Indigenous Strategic Plan</u> and creating a welcoming university atmosphere.











SUSTAINABLE CITIES AND COMMUNITIES



Make cities and human settlements inclusive, safe, resilient and sustainable



Research





Dr Ayan Sadhu

Revolutionizing Infrastructure: Smart Monitoring for Resilient Cities

Ayan Sadhu's research at Western focuses on implementing a rapid, remote, real-time, and robust (4R) monitoring system for civil infrastructure. Utilizing advanced signal processing, AI-powered drones, and augmented reality, his team aims to revolutionize bridge inspections and infrastructure maintenance. This initiative enhances real-time structural health monitoring and cost-effective infrastructure management, contributing to smarter, more resilient urban infrastructure.

Addressing Barriers in Smart Cities and Communities

The Interdisciplinary Research to Address Technical and Social Barriers in Smart Cities and Communities initiative explores challenges like data privacy and ethical concerns. This theme at the Western Academy for Advanced Research builds on a collaborative framework that brings together experts from different fields, industry partners, and policymakers. Through activities such as lecture series, seminars, and workshops, the initiative aims to create ethical, datadriven urban planning solutions.

This page also supports:









Teaching

Planning Sustainable Cities

The Planning Sustainable Cities course, offered by the Department of Geography and Environment, introduces key principles of community planning. It emphasizes sustainable development in urban, regional, and rural settings. The course covers planning theory, public interest, regulatory frameworks, and environmentally conscious urbanism. Through case studies from Canada and abroad, students explore the social, environmental, and economic facets of urban sustainability, learning to address urban challenges through discussions, presentations, and assessments.

Smart Cities and Communities Workshop

The Western Academy for Advanced Research hosted an all-day Smart Cities and Communities Workshop, addressing urban planning and design through digital technologies. Participants explored cutting-edge applications, leading developments, and emerging challenges in smart cities. The event featured insights from leading experts from universities across the world.

Centre for Sustainable Curating

Western's Centre for Sustainable Curating focuses on ecological issues and environmental awareness. Located in the Department of Visual Arts, it emphasizes environmental and social justice, <u>developing low-carbon</u> exhibitions and artworks. The Centre collaborates with The Synthetic Collective, an interdisciplinary project of artists, cultural workers, and scientists, to study and visualize plastic pollution in the Great Lakes.



587 relevant **publications** 2018-2023

350 musical performances in 2023









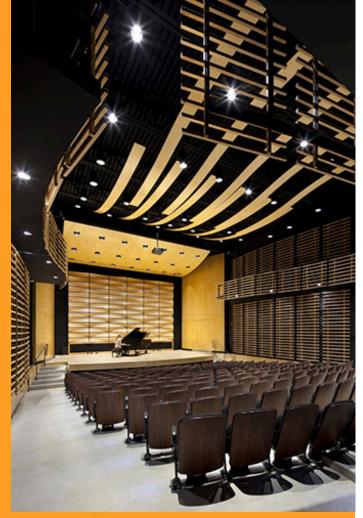
Music for All

The Faculty of Music offers a variety of performances and events throughout the 2023-24 season, including the Fridays @ 12:30 concert series, Opera at Western, and faculty and guest artist concerts. The faculty also hosts guest artist residencies and masterclasses with visiting artists, educators, composers, and scholars from around the world, many of which are free and open to the public. The 225-seat von Kuster Hall is home to more than 270 performances each year, primarily featuring chamber music and small ensembles.

→ Green Campus Tours

Western offers <u>Green Campus Tours</u> that highlight various sustainability features, including gardens, an oldgrowth forest, the Arboretum, a community garden, LEED® Certified buildings, sustainable transportation options, waste management initiatives, sustainable food, on-campus energy production, and GHG reduction efforts. The campus provides free public access to open and green spaces. Tours are available to both campus community members and the general public and can be booked online.





von Kuster Hall

Centre for Urban Policy and Local Governance

Western's Centre for Urban Policy and Local Governance addresses the challenges in urban policymaking through supporting interdisciplinary research, graduate training, and public dialogue. The Centre studies government roles and public participation in addressing the urban-rural gap through programs like the Local Government Program and Urban Development. It also leads the LoGov-RISE Project, specifically focusing on urban-rural dynamics and metropolitan governance in Canada.

This page also supports:









Operations

Green Roof Installed at Western

Western has installed a green roof on the Claudette MacKay-Lassonde Pavilion. This green roof enhances the building's energy efficiency, extends its lifespan, improves aesthetics, and helps manage stormwater runoff, reducing stress on urban stormwater systems. The roof also supports Western's commitment to sustainability by mitigating the urban heat island effect and filtering pollutants from stormwater.

Sustainable Transportation

Western promotes environmentally and economically <u>sustainable</u> <u>transportation options</u>, including:

- Cycling: Nearly 350 bicycle racks, a
 Bike Shelter, and rentable lockers
 encourage cycling as a healthy,
 cost-effective choice, with secure
 parking to prevent theft.
- <u>Public Transit:</u> The subsidized bus pass program provides unlimited bus transportation to all full-time students.
- Electric Vehicle (EV) Charging
 Stations: Western is installing new
 EV charging stations, bringing the
 campus total to 80.
- Western Active Transportation
 Society is a Western community
 group of faculty, students, and staff
 who are passionate and dedicated
 to active transport at Western.

Off-Campus Housing Services

Western's Off-Campus Housing Service offers a wide range of housing options with over 5,000 listings annually for students and staff. The service includes housing mediation to help resolve disputes between students and landlords and Off-Campus Advisors to assist with housing concerns. It ensures equal advertising opportunities for all landlords and provides valuable tools and information to facilitate a positive renting experience for students. The service is dedicated to supporting the university community in finding suitable offcampus accommodation.











Ensure sustainable consumption and production patterns



Research

Transforming Plastic Waste into Food: The BioPROTEIN Project

The BioPROTEIN project, a collaboration between Western University, Michigan Tech University, and the University of <u>Illinois</u>, converts plastic waste into bacterial protein. This innovative process involves breaking down plastics like meal wrappers and water bottles into an oily substance through pyrolysis and chemical reactions. This oil feeds oil-eating bacteria in a bioreactor, producing cells that are about 55% protein. Powered by solar energy and waste gas, the system utilizes technology developed at Western's Free Appropriate Sustainability Technology (FAST) lab, offering a sustainable solution to repurpose plastic waste into valuable nutritional resources.

Also associated with:



53









Circular Economy Lab

The Circular Economy Lab at Ivey conducts research to facilitate waste repurposing among businesses. This includes evaluating factors that influence circular economy principles and quantifying their impact on reducing carbon emissions. A key focus is on organic waste streams, particularly Food Loss and Waste (FLW), for which the lab explores innovative repurposing strategies. Key publications, including Financing the Circular Economy: A Guidance Document for Canadian Financial Institutions and Scaling the Climate-Smart Circular Economy, along with an interactive map detailing FLW exchanges, enhance the understanding and adoption of these practices across Canadian provinces.

Also associated with:



Teaching

What Goes Where @ Western

Western offers comprehensive resources to help students and staff accurately sort waste, reducing contamination and minimizing landfill impact. Detailed quides outline various waste streams, including separate recycling options for containers and paper, and designated bins for organics and landfill waste. Special disposal options for items like batteries and ewaste are also specified. Printable sorting signs and the map of green bin locations across campus are available to facilitate correct waste classification.



Consumer Behavior Program

undergraduate

courses related to

SDG 12

266

relevant

publications

2018-2023

100,000

sq ft

Net Zero Energy Building

The Consumer Behavior program equips students with insights into the factors influencing consumer purchases, including personality, lifestyle, perceptions, attitudes, and cultural influences. Students learn how these elements intersect with marketing strategies to shape business decisions towards more sustainable practices. The curriculum culminates in a Bachelor of Management and Organizational Studies degree, emphasizing practical applications through courses like the Seminar in Consumer Research. In this course, students critically analyze and discuss key studies, gaining a deeper understanding of the dynamics at play in consumer markets.

Foods & Nutrition and Chemical **Engineering**

This unique dual degree program combines Chemical Engineering (BESc) and Foods & Nutrition (BSc) at the Faculty of Health Sciences and the Faculty of Engineering, completed over five years. It equips students to enhance food production, distribution, and sustainability, focusing on innovative solutions like sustainable packaging to minimize environmental impact. Graduates are prepared for careers in product and process development, food safety, and quality assurance within the food, agricultural, and manufacturing industries, addressing global challenges and contributing to a healthier, more sustainable world.











→ Snack Wrapper Recycling Expands at Western



Katarina Kukolj

Katarina Kukolj, a master's student in biology, has expanded a <u>snack wrapper recycling</u> <u>initiative</u> across Western's campus. Inspired by her passion for environmental conservation, Kukolj introduced compost and mask recycling programs during the pandemic. Now, with \$4,000 from the Western Sustainable Impact <u>Fund</u>, she manages nine TerraCycle recycling boxes in various buildings. The program allows the recycling of chip bags, granola bar wrappers, and resealable plastic bags. With plans to extend the program further, Kukolj's efforts significantly contribute to waste reduction and environmental stewardship at Western.

From 'Western U' to PlantYou

Carleigh Bodrug, a Western University alumni, has significantly advanced sustainable eating and waste reduction through her platform, PlantYou. With over 11 million followers and two New York Times bestsellers, she offers simple, plant-based recipes and tips on minimizing food waste. Her journey started with a personal health revelation, leading to a plant-based diet that she now promotes widely. Through her accessible recipes and the <u>PlantYou app</u>, Bodrug helps people eat healthier, save money, and reduce environmental impact.



Carleigh Bodrug



→ EnviroUSC

<u>EnviroUSC</u> is dedicated to promoting environmental sustainability at Western. The organization spearheads various initiatives, including gardening, sustainable food practices, waste reduction, and broad outreach efforts to engage students in creating a more sustainable campus. They believe that students have the power to make a significant positive impact on the environment, both within the university and in the wider community.

Operations

Plant-Based Dining

Odd Burger, founded by Western alumni James and Vasiliki McInnes, has launched its first university location at Western's University Community Centre, offering a fully vegan menu including burgers and dairy-free milkshakes. Supported by the growing demand for sustainable dining options, this establishment serves as an introduction for all students, faculty, and staff to engage with plant-based eating.

Also associated with:









Western encourages students to adopt sustainable practices in residence:

Living Sustainably in Residence

- Choose2Reuse Program: For a \$5 fee, students use reusable containers for dining hall take-out, reducing waste.
- Meatless Mondays: Promotes plant-based meals, aiming for 40% plant-based menus by 2024, enhancing health and sustainability.
- Waste Reduction Week: Annual October event with waste-diversion challenges and educational pop-up booths.
- Wellness Carnival: Events highlighting environmental wellness, with tips on sustainable living.
- Moving Out: Opt for donating and recycling items over trashing to help the environment and community.

Also associated with:







Sustainable Food

Hospitality Services at Western champions sustainability with various initiatives:

- Fair Trade Campus: Recognized for eight years running as a Fair Trade Campus.
- Honeybee Hives: Maintains hives on campus, using the honey in recipes, for tea and coffee, and bottling it for
- Waste Reduction and Healthy Eating: Encourages students to improve waste reduction, source food responsibly, and embrace healthy eating.
- <u>Seafood Sourcing</u>: High Liner Foods supplies 99% of responsibly sourced seafood for Residence Dining.

These efforts by Hospitality Services are detailed in their Sustainability Report and Action Plan.

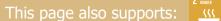














Take urgent action to combat climate change and its impacts



Research

Carbon Transformation with Biochar

<u>Dr Naomi Klinghoffer</u>, a Western Fellow in the **Nature-inspired Solutions for Carbon** <u>Transformation theme</u>, focuses on utilizing biochar to combat climate change. Biochar, produced through pyrolysis of decomposing plants, captures carbon and serves as a sustainable agricultural product. Collaborating with Chris DeGroot and Elizabeth Webb, Klinghoffer explores biochar's potential for carbon storage and soil enhancement. Her research advocates for a circular economy, transforming waste into value and developing sustainable processes to reduce environmental impacts.



We can take carbon from a tree, and we can carbonize it [...] to make something very stable, where carbon is going to be stored for a very long time.

The Northern Hail Project

The Northern Hail Project (NHP) at Western aims to enhance understanding of damaging hail storms and improve hail detection across Canada. Supported by various grants and funds, NHP focuses on improving severe storm prediction, mitigating harm to people and property, and exploring future climate change impacts. NHP also provides a <u>dashboard</u> summarizing events investigated by its Storm Survey Team. The data, searchable by date, event type, and collected information, covers hail events under investigation and is accessible on both desktop and mobile devices.



This page also supports:











Teaching

Solutions for Carbon Transformation Workshop

The Western Academy for Advanced Research hosted a workshop on new developments in carbon transformation. The public event included an interactive Design Thinking session where participants collaboratively developed solutions to address climate change. The workshop was part of the Nature-Inspired Solutions for Carbon <u>Transformation</u> theme at the <u>Western Academy</u> for Advanced Research, offering hands-on learning experiences to explore innovative ways to tackle climate change.

Graduate Diploma in Climate Risk Assessment and Opportunity

This new multidisciplinary graduate diploma will equip learners with advanced skills in climate risk management, preparing them for impactful careers in climate change adaptation. Jointly offered by the Faculties of Engineering, Science, Social Science, and the Ivey School of Business, the program includes one core course and three discipline-specific courses relating to societal risks and adaptation to climate change.

Major in Climate Change and Society

This major prepares students to become leaders in addressing the climate crisis by exploring its human dimensions and societal impacts. This interdisciplinary program covers a wide range of topics, including the historical evolution of climate change, the current climate emergency, vulnerabilities, and the inequitable global impacts. Students also study sustainable solutions, equipping them with the tools to take meaningful action. Graduates can pursue diverse career paths in climate analysis, policy making, environmental planning, and more, across government, private industries, NGOs, and other sectors.



undergraduate courses related to **SDG 13**

434 relevant publications 2018-2023

2050

achieve net-zero emissions for campus operations by 2050

This page also supports:









58

Net Zero Lab

The Net Zero Lab, established by the Centre for Building Sustainable Value at Ivey, mobilizes Ivey's research and teaching expertise to help business leaders and policymakers navigate the complexities of the net zero transition. Engaging leading Canadian businesses through dialogue, research, and collaboration, the Lab focuses on developing actionable net zero strategies. It has produced publications such as <u>Potential Pathways to a Net</u> Zero Industrial Sector and Corporate Strategies for Net Zero. These works contribute to a deeper understanding of how companies can effectively pursue net zero goals while avoiding pitfalls like <u>greenwashing</u>.

→ SDG Week at Western

Western's annual SDG Week supports SDG Week Canada, a national initiative to engage university and college campuses with the 17 UN SDGs. Western hosted events like How to Cope with <u>Climate Anxiety</u>, which addressed the emotional challenges of living in a warming world, and the Community SDG Connections event, hosted in collaboration with the Pillar Nonprofit Network. These events fostered meaningful collaboration and dialogue among both on- and off-campus members involved in advancing SDG initiatives, strengthening the collective effort towards achieving the SDGs.

This page also supports:











In the spring, Western students, faculty, Indigenous community members and representatives from the <u>Upper Thames River</u>

<u>Conservation Authority</u> gathered on the banks of Medway Creek to plant 200 native shrubs and 100 tree cuttings. The live stake planting event was part of a <u>Campus as a Living Lab project</u> to resist erosion, mitigate flooding, and improve water quality for years to come.



Operations

Path to Net Zero

Western is committed to reducing carbon emissions and conserving energy on campus, with goals to cut GHG emissions by at least 45% by 2030 (relative to 2005 levels) and achieve net zero emissions by 2050. Key initiatives include implementing an energy loop that upgrades the chilled water network for year-round operation, enabling energy sharing between buildings. New constructions and retrofits through the Deep Energy Retrofit Program are designed to integrate with this energy loop, achieving a 60%-80% reduction in GHG emissions.

Sustainable Procurement & Retail

Western encourages students, staff, and faculty to make sustainable purchasing decisions by choosing second-hand items, ethical brands, shopping locally, and considering the social impacts of their purchases. For tips on making sustainable choices, check out our Sustainable Living Guide for the Western Community. Western also integrates sustainability into its procurement and retail practices, aligning with its sustainability values and goals. Procurement Services is guided by the <u>new</u> Supplier Code of Conduct, while Western Retail Services, through its Environmental Sustainability Policy, collaborates with campus partners, community groups, and vendors to support environmental well-being. Initiatives like eliminating plastic bags and enforcing ethical practices with the Code of Conduct for Trademark Licensees demonstrate this commitment.

Declaration on Planetary Health

The Schulich School of Medicine & **Dentistry**, along with other leading academic health institutions, has signed the Academic Health **Institutions' Declaration on Planetary** Health. This commitment calls for training healthcare professionals to incorporate planetary health into their practice and research, with a focus on communities most affected by climate change. The declaration emphasizes integrating Indigenous traditional knowledge, supporting planetary health research, and adopting a patient-planetary cobenefit approach, where both patient health and environmental impact are considered in medical decisions.















Conserve and sustainably use the oceans, seas and marine resources for sustainable development



Research

Revolutionizing Sustainability in Canada's Fishing Industry

The \$15.8-million Marine Biomass Innovation (MBI) initiative, led by Western Research Chair Raymond Thomas, seeks to create sustainable solutions in Canada's fishing industry by fully utilizing marine biomass. Grounded in Etuaptmumk, or two-eyed seeing, the <u>project</u> integrates Indigenous knowledge with Western practices. Collaborating with <u>Indigenous communities</u>, industry partners, and global academics, the MBI project aims to drive economic development in coastal, remote, and rural regions, particularly benefiting Mi'kmaq communities. The initiative has already reached a key milestone with research agreements signed between scholars and Mi'kmaq Chiefs, and it aims to develop innovative products for sectors like agriculture, health, and cosmetics, enhancing community sustainability and resilience.

Advancing Fish Conservation and Aquaculture Sustainability

Dr Neff, an esteemed authority in fish behavior, genetics, and ecology, leads the Neff Lab in developing innovative research that enhances the conservation of native biodiversity and the sustainability of aquaculture. The lab's current project involves creating and validating experimental protocols and statistical models for using micro-satellite environmental DNA to precisely estimate population changes in key freshwater fishes. This cutting-edge research promises to significantly improve fisheries management and conservation efforts. The Neff Lab collaborates with various academic, industrial, and governmental partners, providing valuable opportunities for students to engage in transformative ecological and genetic research.

Teaching

Learning in the Field

The Western Science Departments of Biology and Earth Sciences offer students extensive hands-on learning experiences across five continents. Students gain practical experience from studying impact craters in Utah to exploring the rainforests of Costa Rica. Marine biology students have the chance to study at the Bay of Fundy in New Brunswick, home to the world's largest tides, where they learn oceanographic techniques and assess human impacts on marine ecosystems. Additionally, a unique field course on a remote tropical island in Belize immerses students in the vibrant coral reefs of Lighthouse Reef, where they conduct research while exploring the underwater habitats.

Also associated with:







40 undergraduate courses related to **SDG 14**

> **123** relevant publications 2018-2023

99%

of seafood for residence dining is responsibly sourced

Aquatic Courses

The Department of Biology offers a range of courses focused on aquatic ecology. Aquatic Ecology explores water habitats, emphasizing the diversity and roles of zooplankton and microorganisms in both freshwater and marine ecosystems. The course also examines the ecological impacts of ocean acidification, invasive species, and eutrophication. Marine **Environments** delves into the ecological and physiological challenges faced by marine animal communities, including those in intertidal, benthic, planktonic, coral reef, and deep-sea environments. The course covers topics such as feeding, movement, defense, and life cycle strategies, with a strong emphasis on invertebrate examples.

Also associated with:







→ Innovative Marine Education with Immersive Technology

Paul Mensink, from Western's Department of Biology, is renowned for his innovative use of immersive technologies to enhance student learning in environmental science. His recent creation, MarineXR, allows students to virtually experience close encounters with a giant basking shark and explore key marine topics such as coral reefs, fisheries, plastic pollution, and invasive species. MarineXR is freely available on Google Play, the Apple App Store, and the eCampus Ontario open library, making these interactive learning experiences accessible to a broader audience.

Also associated with:

















Western Science Speaks Podcasts

Western Science Speaks Podcast is a short-format interview show exploring work at the Faculty of Science. The show covers a wide range of topics in science relevant to a broad spectrum of listeners, such as environmental sustainability. One episode, Sharks Get Lonely Too, features Paul Mensink, a marine ecologist from Western's Department of Biology. In this episode, Mensink discusses his research on sharks that have strayed far away from their natural habitats due to humaninduced environmental changes. He also explains human-marine interactions and how we can #SaveTheSharks.

Also associated with:





Investigating Marine Microplastics

<u>Surface Science Western (SSW)</u> collaborates with a wide range of companies and clients to lead critical research into microplastics, addressing environmental concerns that affect aquatic ecosystems. Microplastics, tiny particles pervasive in every ocean and the most remote corners of the planet, pose significant threats to marine life and ecosystems. At SSW, researchers work to characterize these pollutants by analyzing plastics and fibers found on shorelines, in wastewater, and within aquatic species. Partnering with various stakeholders, they focus on identifying sources such as synthetic clothing fibers and cosmetic microbeads. The project aims to understand the extent of harm and develop strategies to minimize the environmental impact.

Also associated with:





Arctic Seabed Mining

<u>Inspiring Minds</u> is an initiative that aims to broaden awareness and enhance the impact of graduate student research while developing transferable skills. Carol Dyck, a PhD candidate at the Faculty of Law at Western, investigates the governance challenges of deep seabed mining in the Arctic Ocean. Her research examines the Draft Exploitation Regulations of the International Seabed Authority's Mining Code and their alignment with upcoming international biodiversity agreements. Focusing on the ecological and legal complexities in the rapidly changing Arctic region, Carol shares her work with the community, contributing to crucial policy discussions aimed at establishing marine-protected areas in the Central Arctic Ocean.

Also associated with: 13 mm









Operations

Sustainable Seafood on Campus

Western is committed to sustainably sourcing all seafood served on campus. Our efforts are supported by partnerships with Marine Stewardship Council certified partners and Campus Eateries. A key supplier for Residence Dining has pledged to source all of its products responsibly, with 99% of their seafood supply coming from certified sustainable or responsible sources. Our campus eatery also features locally produced, handcrafted sushi, packaged in fully recyclable materials. By collaborating with organizations that prioritize sustainable practices, we reinforce our dedication to responsible and ethical dining on campus.

Reducing Plastic Waste

Western is actively committed to reducing plastic waste on campus as part of its broader environmental sustainability efforts. Western has implemented several key initiatives to minimize the use of single-use plastics. A significant step in this direction occurred when the university stopped selling disposable plastic water bottles across campus. These bottles are no longer available at university functions, vending machines, or any on-campus restaurants and vendors. Additionally, Western is reducing excessive food packaging, especially single-use plastics, in all campus food and beverage offerings. This is part of a broader strategy to promote sustainability, including better recycling and responsible litter disposal.

















15 LIFE ON LAND



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Research

Carbon Cycle, Climate, and **Ecosystems Research**

Natasha MacBean's C3E Lab at Western focuses on understanding the complex interactions between terrestrial vegetation, carbon, and water cycles in response to global climate change and human activities. The lab utilizes process-based land surface models and spatiotemporal data analysis to study how rising CO2 levels, land use changes, and environmental factors impact ecosystems worldwide, from boreal forests to semi-arid grasslands. By advancing our understanding of these interactions, the lab contributes to strategies for mitigating the harmful effects of climate change and promoting ecosystem resilience.



Making Windows Bird-Friendly

Brendon Samuels, a biology PhD candidate whose research at the Advanced Facility for Avian Research focuses on preventing bird collisions with glass buildings, studies how birds perceive windows. After observing frequent fatal crashes at the **International and Graduate Affairs** Building, Samuels discovered that traditional bird-shaped stickers are ineffective. Instead, patterns with gaps no larger than five centimeters are much more effective. Collaborating with Western Facilities Services, Samuels has helped retrofit buildings with bird-safe coatings, significantly reducing collisions. He also advocates for city bylaws and supports Bill 145, Bird-Safe Windows Act, to incorporate bird-safe designs into the Ontario Building Code, stressing the importance of enacting effective conservation measures.

This page also supports:



Teaching

Animal Ethics

Western upholds the highest ethical standards in animal research, requiring all vertebrate animal use in research and teaching to be reviewed and approved by the Animal Care Committee (ACC). This process ensures compliance with federal, provincial, and regulatory guidelines, including the Canadian Council on Animal Care, Ontario's Animals in Research Act, and CALAM standards. The ACC oversees Animal Use Protocol reviews, Post-Approval Monitoring, Animal Ethics Education, and adherence to policies, safeguarding the ethical use of animals in scientific study.

Field Courses

Western is part of the Ontario Universities Program in Field Biology, which offers immersive, two-week field courses for academic credit. Students can choose from a variety of courses, including those led by Western faculty or by faculty from other universities. For example, one course explores the diverse environments of Adirondack State Park, covering boreal, northern hardwood, upland, lowland, and aquatic communities, while focusing on field techniques, independent research, and the park's ecological history.





231 relevant publications 2018-2023

1 st

university in Canada to be designated a Bee Campus

Biodiversity Inventory

The Western Biodiversity Inventory is a collaborative initiative led by students, staff, and faculty from Western's Department of Biology and its affiliates. The campus community is invited to document local biodiversity using the iNaturalist app, contributing to a vital database that will inform future conservation efforts and environmental research. This project serves as a Living Lab for experiential learning, coordinated by a volunteer committee from the Faculty of Science and supported by Western Sustainability and Facilities Management.









Digitizing Zoological Collections

Nina Zitani, curator of Western's Zoological Collections, oversees a vast archive of tens of thousands of insect specimens, including rare and exotic species collected over more than a century. These meticulously preserved specimens reflect the biodiversity of Ontario and beyond. Thanks to \$30,000 from the Western Sustainable Impact Fund, Zitani and her colleagues will make the collections accessible for global biodiversity research. The project is part of Western's broader sustainability effort, supported by the \$406,000 awarded to 30 <u>initiatives</u> through the fund.

Also associated with:

Knowledge Sharing







Community Engagement and

The Department of Biology is committed to community engagement, actively sharing its extensive knowledge with the public. Faculty members regularly deliver lectures on topics such as Conservation Biology, Climate Change, Human Genetics, and Ecosystem Health. These <u>educational</u> <u>initiatives</u> include public talks, high school visits, and hosting groups from across Southwestern Ontario, aiming to foster a deeper understanding of biological processes and their impact on both nature and society.

Also associated with:









Nina Zitani

Western Wildlife **Conservation Society**

The Western Wildlife Conservation Society (WWCS) is a student-led organization committed to educating and engaging students in wildlife conservation efforts. WWCS focuses on raising awareness about reducing ecological footprints and promoting a healthy, sustainable planet. The society collaborates with local organizations like the <u>London Environmental Network</u> and <u>Salthaven</u> Wildlife and Education Centre to protect our environment and the wildlife that inhabits it.

Also associated with: 12 GOOGNATION 13 AURILLE 17 HATCHESING CONTROL 13 AURILLE 17 HATCHESING CONTROL 17 HATCHESING CONTROL 17 HATCHESING CONTROL 18 AURILLE 18 AURIL







→ Wildfire Experts' Input

Western climate change, ecological, and health experts provide consultancy and suggestions on the impact of wildfire crises in Canada concerning the health effects of wildfire smoke, climate change and wildfires, ecological damage of wildfires, as well as disaster response and mitigation.

Also associated with:







Operations

Bee Campus

Western proudly became the first university in Canada to be designated as a **Bee** Campus, recognizing its commitment to supporting pollinators and their habitats. As part of this ongoing effort, the campus community is encouraged to participate in Pollinator Week. This week provides an opportunity to learn about the vital role pollinators play in our ecosystems and agriculture. Western's initiatives include planting native species, hosting native plant giveaways, and organizing educational events to raise awareness about the importance of pollinators. Additionally, the university has reduced grass cutting in certain areas to allow wildflowers and grasses to flourish, and it maintains pollinator-friendly trees and naturalized spaces around campus, further enhancing the environment for these essential species.

Green Space & Gardens

Spanning over 450 hectares within the biodiverse Carolinian Life Zone, Western University is dedicated to sustainable management and ecological stewardship of its green spaces. The campus features preserved natural and wetland areas, supports pollinator-friendly plants like milkweed, and promotes biodiversity through initiatives such as the **Sherwood** Fox Arboretum and the Bee Campus designation. One highlight is the Pollinator Garden, established by the Friends of the Garden volunteer group. This garden features native species cultivated in Western's greenhouses and sourced from local nurseries. The gardens are open to the public, inviting the community to enjoy and engage with these green spaces.



Western Pollinator Garden Photo Credit: Trisha Niles

Invasive Species Management

Western is actively managing invasive species across campus, with targeted efforts focused on buckthorn, nonnative honeysuckle, and an invasive Arailia species identified by the Department of Biology. Invasive species are not planted on campus, and those already present are either removed or managed until their natural end of life, followed by replacement with native species. **Environmental Sciences classes and** graduate students from the Master of **Environment and Sustainability** program have also contributed to these efforts through hands-on removal and data collection activities.









16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



2nd

in the world for Peace, Justice and Strong Institutions 702

relevant publications 2018-2023



7 comm

free community
based legal
clinics

Research

OutputCentre for Transitional Justice and Post-Conflict Reconstruction

The Centre for Transitional Justice and Post-Conflict Reconstruction is a collaborative, interdisciplinary hub that unites experts from across the Western community. The Centre's teaching and research focus on key issues such as transitional justice, reconciliation, criminal accountability, legal reconstruction, environmental impact, human rights, economic justice, and more.

This page also supports:



69







Law and Feminism Research Group



The Law and Feminism Research Group at Western brings together faculty and graduate students focused on feminist perspectives in law and equality. Addressing issues such as feminist legal theory, policy, and social justice, the group explores the connections between women's issues and broader social inequalities, including race, Indigeneity, and gender. Through initiatives like the Feminism in Law Speakers Series and annual research workshops, the group strengthens feminist scholarship and law reform while building connections with scholars and activists beyond the university.

Teaching

Description Local Government Program

Housed in the Faculty of Social Science, Western's Local Government Program (LGP) is Canada's only graduate public administration program specializing in local government. Celebrating its 50th anniversary in 2024, LGP is a leader in municipal-level public administration education, offering two unique opportunities to study the evolving fields of local government and administration. The Master of Public Administration program, available in both full-time and part-time formats, is one of Canada's premier programs, catering to mid-career local government officials seeking to broaden their perspectives and enhance their skills, as well as to aspiring professionals pursuing careers in municipal government. Additionally, the <u>Graduate Diploma in Public Administration</u> is tailored for working local government professionals, providing specialized education in local administration to advance their careers in the public sector.



Western Education's EdD in Equity, Diversity, and Social Justice is for professionals dedicated to social justice and human rights, seeking to deepen their critical thinking and drive action-oriented change. The program integrates professional and academic knowledge, enabling students to apply equity principles in their practice. With a cohort structure, students study together for three years, creating a strong network and shared learning to advance equity in diverse fields. Graduates are equipped to lead meaningful change in their professions and communities, promoting inclusive and equitable practices.

Transitional Justice Research

Science

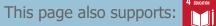
Western is a leader in transitional justice research and offers the only program in North America that focuses on transitional justice at both the undergraduate and graduate levels. The Undergraduate Minor in Transitional Justice and Post-Conflict Reconstruction introduces students to the emerging debates in these fields. Additionally, the Collaborative Graduate Specialization is available at both the master's and doctoral levels.











Cial Science

→ Global Dialogue on Homelessness

Abe Oudshoorn, a Western professor, and his colleagues have created the <u>International Journal on Homelessness</u> to encourage global dialogue on homelessness. The journal accepts articles in multiple languages and ensures representation from the Global South, promoting a more inclusive conversation. Oudshoorn is also working with NGO Working Group to End Homelessness, advocating for homelessness to be included in the UN's Sustainable Development Goals by 2030. Locally, he collaborates with Ontario homelessness advocates to develop policy frameworks aimed at ending homelessness, supported by funding from the Social Sciences and **Humanities Research Council.**

Also associated with:









The UWO Humanitarian Society collaborates with the Canadian Red Cross to raise funds and increase awareness of humanitarian crises. They also offer their members a wide range of volunteer opportunities within the London community. Past initiatives have included fundraising for care packages containing essential supplies and non-perishable food items, which are then donated to local food banks and shelters in London, Ontario.

Also associated with:







→ Community Legal Services

Community Legal Services (CLS) is a dual-purpose initiative, serving as both a community legal clinic and a clinical education program operated by the Faculty of Law at Western University. CLS is funded collaboratively by Legal Aid Ontario, the Law Foundation of Ontario, Fanshawe Student Union, Western's University Students Council, and the Faculty of Law. CLS offers free legal services to low-income individuals in the London community, including Western University students. Each academic year, over 125 law students, supervised by experienced lawyers, provide these essential services. The students gain valuable hands-on experience while supporting the community.

Also associated with:







Operations

Western Foot Patrol

Western Foot Patrol is a volunteer-run service at Western University, committed to maintaining a safe and secure campus environment. With 250-300 volunteers each year, the program offers safe accompanied walks, raises awareness of personal safety, and deters crime through visible patrols, all while cultivating a sense of responsibility among students. Foot Patrol also has an app, available in the Google and Apple stores, which allows users to chat with a dispatcher, request a safe walk, report non-emergency concerns, and access a map of service areas, making campus safety more accessible than ever.

Campus Safety

Western University ensures campus safety through several key initiatives:

- Western Special Constables: Patrol campus, engage with the community, and offer safety programs, including:
 - Women's Safety Program: Provides personal safety tips and defensive techniques, with an optional simulated attack session.
 - Work Safe Program: Supports those working late on campus with a call-in service for added security.
- Fire Safety Team: Manages fire and life safety, providing training and support.
- **Alert WesternU:** An emergency notification system that sends alerts about dangers and critical updates to all university members.
- **Code Blue Emergency Phones:** 29 phones across campus provide direct contact with the Western Special Constable Service.

These efforts work together to create a secure campus environment.

This page also supports:









Legal Information for Sexual Assault

Western Law students have initiated a program called <u>Legal Information for Sexual Assault</u> (LISA). It is supported by <u>Community Legal Services</u> and <u>Western's Faculty of Law</u>. LISA provides discreet legal guidance to Western University students affected by sexual assault, with trained law students offering information, referrals, and support.



17 PARTNERSHIPS FOR THE GOALS



Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



9,020

relevant publications 2018-2023

100+

international learning programs across **40+** countries

undergraduate courses related to SDG 17

Research

Martian Meteorites

In a groundbreaking study published in Science Advances, planetary geologist Livio Tornabene has traced the origins of Martian meteorites. Five specific craters within Mars' Tharsis and Elysium volcanic regions are the source of the majority of the Martian meteorites on Earth. Building on Tornabene's earlier work with advanced techniques and data, the research offers new insights into Mars' geological history. As a member of Western's Institute for Earth and Space **Exploration**, his work with an international team of researchers provides a framework that reshapes future studies of Martian meteorites.

This page also supports:



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Lawrence National Centre for Policy and Management



The Lawrence National Centre for Policy and Management at Ivey is a leading authority on business-government relations, cultivating future leaders who recognize the critical importance of collaboration between the public and private sectors in shaping effective policy. The Centre's Faculty and Fellows guide its research, teaching, and outreach efforts, with a strategic focus on digital innovation, physical infrastructure, and trade.

Teaching

Community Engaged Learning

Western's Community Engaged Learning (CEL) program takes education beyond the classroom, linking students with local and global communities to address real-world challenges. By partnering with various groups and organizations, CEL fosters community-driven problem solving and collaboration, benefiting both students and their partners. This approach allows students to apply their course knowledge in practical settings, ensuring they reflect, connect, and thrive, while leveraging Western's academic resources to create meaningful community impact.



By the Numbers

62,210

hours of students' community engagement 4,439

students participated in some form of CEL 226

community members across 124 organizations partnered with CEL 39 courses

across 9 faculties embedded CEL experiences into the curriculum

International Learning

<u>International Learning</u> at Western partners with global institutions and the campus community to offer diverse programs that prepare students to become globally engaged graduates. The team supports student exchanges, study abroad opportunities, internships, and research experiences, as well as international learning initiatives on campus. Additionally, they provide crucial safety resources, including travel registry compliance, predeparture training, and International SOS services. The team also helps support incoming exchange and visiting students, as well as faculty and staff who coordinate international learning programs.



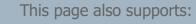
Pro Bono Students Canada

Pro Bono Students Canada (PBSC), Western Chapter, is a national program launched by the Faculty of Law. The mission of the program is to pair law students with community agencies in need of free legal services. Agencies typically involved with PBSC include public interest and non-profit organizations, tribunals, legal clinics, and lawyers working pro bono on a particular case.









→ Collaborative Lifelong Learning

In <u>Episode 164 of Illumination</u> by Modern Campus, Bryan Benjamin, Executive Director of The Ivey Academy, and Amrit Ahluwalia, Executive Director of Continuing Studies at Western University, discuss the importance of collaboration in higher education. They emphasize the need for scalable lifelong learning ecosystems that extend beyond traditional degrees, helping learners stay relevant amid rapid technological changes. The Ivey Academy and Continuing Studies at Western both work collaboratively to provide comprehensive learning opportunities that bridge academic and professional development. The episode also addresses the operational challenges of making lifelong learning accessible, the value of global alumni engagement, and the growing necessity for universities to align with industry needs.

Radboud-Western Collaboration Fund

Radboud University in the Netherlands and Western University have established the Radboud-Western Collaboration Fund to support joint initiatives that align with their strategic priorities. This fund encourages innovative education and multidisciplinary research projects that have the potential to make a significant academic and societal impact. The fund offers up to \$25,000 for one-year joint projects in research and education. It also supports opportunities for shortterm mobility visits between the two universities, reinforcing deeper collaboration and knowledge exchange.

→ Summer Learning Program on Human Rights

Western welcomed a group of students from Kyung Hee University, South Korea, for a two-week program focused on human rights in Canada. Organized by Western International, the program featured workshops, lectures, and handson activities covering topics like Indigenous leadership, anti-oppression, and food sovereignty. Students also engaged in cultural events within the London, ON community, fostering international connections and expanding their understanding of global human rights issues. The success of this pilot program highlights Western's commitment to enhancing global citizenship and intercultural competence through collaborative international initiatives.



Operations

Western Heads East

Western Heads East is a collaboration between Western staff, students, faculty, and African partners using probiotic food to contribute to health and sustainable development. This internship program provides students with a unique international experience focused on these goals in Africa. Interns work on multidisciplinary projects, gaining hands-on experience in sustainable business development and social enterprise while contributing to community-run yogurt kitchens and laboratory facilities. They also help raise awareness of health sustainability in East Africa within the Western University community, all while earning course credit and developing valuable skills in global health and social entrepreneurship.



Also associated with:

3 **MUNICIPAL A SOCIAL A SOCIAL ASSOCIATION ASSOCIATION







Partnership Development Grants

The SSHRC Partnership Development Grants, offered by the Social Sciences and Humanities Research Council, provide essential funding for up to three years to support innovative research and collaboration in the social sciences and humanities. These grants support both new and existing partnerships, with a strong focus on involving students and emerging scholars. By enabling the design and testing of scalable partnership models, the grants aim to generate impactful research outcomes that align with SSHRC's Insight and Connection programs. Additionally, they welcome projects involving Indigenous research and research-creation, promoting inclusivity and cultural relevance in research.





International Partnerships

Western is a Canadian leader in global academic and research collaborations, forging strong partnerships with governments, academic institutions, and organizations worldwide. Western International drives these initiatives, ensuring that they align with the university's strategic priorities while supporting student mobility, industry engagement, and collaborative research. These partnerships are designed to be productive, sustainable, and mutually beneficial, underscoring Western's commitment to addressing global challenges through collaborative efforts.

Also associated with:















Planning Today for a Sustainable Tomorrow

As Western University continues to advance its sustainability journey, we remain dedicated to aligning our research, teaching, outreach, and operations with the 17 UN Sustainable Development Goals (SDGs). Through partnerships at the local, national, and global levels, we are committed to driving positive change and building a sustainable future.

Western is also actively engaged in sustainability tracking frameworks, including the Times Higher Education (THE) Impact Rankings, QS Sustainability Rankings, and AASHE STARS (Sustainability Tracking, Assessment & Rating System). They help us measure our impact, monitor our progress, and guide future actions in support of the SDGs. Western ranked 2\frac{1}{2} globally in the THE Impact Rankings 2024, 10th globally in the QS World University Rankings: Sustainability 2024, and we proudly received a Gold STARS rating from AASHE.











Act With Us

The initiatives highlighted in this report represent just a portion of Western's efforts to address the SDGs. To learn more about our actions and ongoing commitment to sustainability, please visit:

Western SDGs

Western Sustainability

The President's Advisory Committee on the Environment and Sustainability (PACES)

We invite you to connect with us! If you have research projects or sustainability initiatives to share, please reach out at sdg@groups.uwo.ca.

Join us in taking action—explore more ways to get involved in Western's sustainability efforts $\underline{\text{here}}$.



