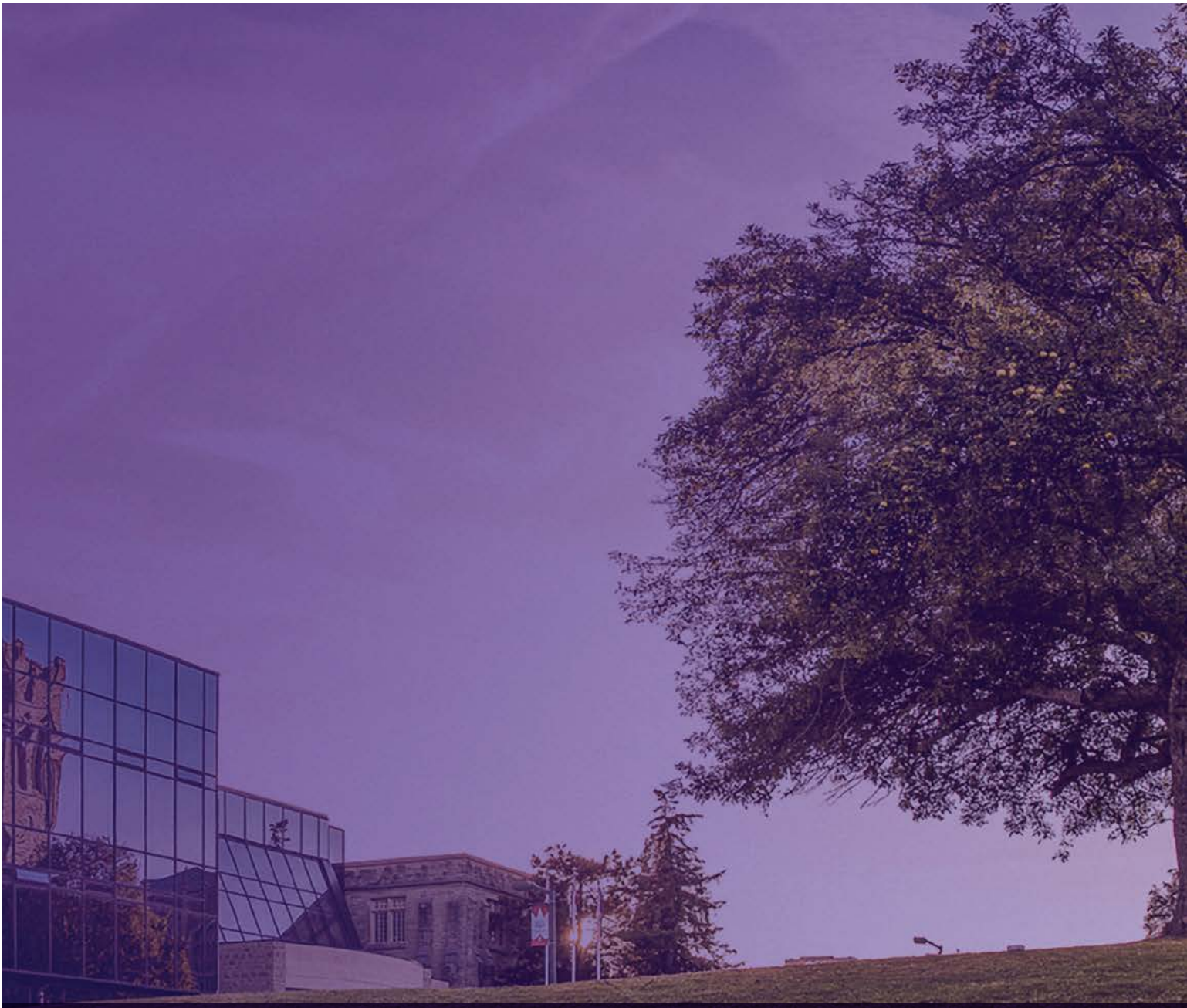




Engineering

Undergraduate
Viewbook '24–25





A Sense of Community

Western University recognizes that its campus is situated on First Nations territory. The Great Lakes woodland region of Turtle Island has been home to many Nations over centuries and at different times, including the Anishinaabek, Haudenosaunee, Lunaapéewak and Huron-Wendat peoples.

The three local First Nations communities closest in proximity to Western are:

- Chippewas of the Thames First Nation;
- Oneida Nation of the Thames; and
- Munsee-Delaware Nation.

For some time, the Dish with One Spoon Covenant Wampum served as an agreement between the Haudenosaunee and Anishinaabek for sharing hunting territory, thus ensuring the viability of this land into the future. After contact, Treaty-making between the Anishinaabek

and Britain took place. In the London area, there are several Treaties including the Treaty 6 London Township, Treaty 7 Sombra Township and Treaty 21 Longwoods. Today, London and the region are home to a diverse Indigenous population, including First Nations, Métis and Inuit people. By recognizing Indigenous peoples' historical and present relationships to the land and London, Ontario, Western makes explicit Indigenous peoples' ongoing presence and their rights to self-determination.

Please visit: enguwo.me/indigenous



Where urban energy meets hometown charm

Located in Southwestern Ontario, London is a thriving economic, entertainment and cultural centre. With over 422,000 residents, it ranks as Canada's 15th largest city. London provides a "big city" experience while remaining more affordable than many other Canadian cities. It has a strong educational and healthcare community, ensuring access to excellent services. The city also maintains a safe and clean environment reminiscent of a small community.

We ensure our students thrive through student wellness!

To create well-rounded engineers, we promote inclusive settings, and place a priority on mental health through teamwork and counselling support.

Please visit:
enguwo.me/student-wellness

We're home to some of the best services in Canada

The Globe and Mail agrees; their student satisfaction survey has placed Western Residence as number one for 11 consecutive years!

AT A GLANCE

Western Engineering offers a variety of degree options and experiential learning opportunities that allow you to shape your education.

Explore different engineering disciplines with our Common First Year

ADMISSION REQUIREMENTS

Ontario high-school students:

- + English (ENG4U)
- + Advanced Functions (MHF4U)
- + Calculus and Vectors (MCV4U)
- + Chemistry (SCH4U)
- + Physics (SPH4U)
- + Plus one other 4U or 4M level course (highest grade is chosen)

Non-Ontario students (please visit):

enguwo.me/next-steps

Featured Programs



Engineering and Ivey HBA



Engineering and Law



Concurrent Degrees



Smart Start



Design Thinking (ES1050)

A unique and immersive learning experience exclusive to Western Engineering, ES1050 is a first-year required course in which students are introduced to the fundamental principles and practices of professional engineering. Through engaging team-based design projects, this course provides valuable context for developing research, critical thinking and people skills.

Artificial Intelligence Systems Engineering

This unique combined degree program incorporates deep knowledge and skills in Artificial Intelligence and Data Analytics. This is done in combination with either one of the following engineering core disciplines; Mechanical, Electrical, Civil, Chemical or Mechatronics Systems Engineering. Graduates will be equipped to employ AI in solving a myriad of engineering problems and build specialized skills in data engineering, the Internet of Things (IoT) and software engineering.



Biomedical Engineering

BME is offered as a combined degree with another core engineering discipline. Graduates are qualified for a range of industry positions, including, but not limited to, the medical device and biotechnology sectors. Similarly, they may also seek admission to leading biomedical engineering graduate programs and medical schools.



CORE PROGRAMS

The image features a central portrait of a young woman with dark hair, smiling, wearing a light blue ribbed turtleneck sweater. The portrait is fragmented into several rectangular sections by white lines. Overlaid on these sections are seven dark purple boxes, each containing the name of an engineering program and a QR code. The programs are: Mechanical Engineering (top left), Civil Engineering (top right), Chemical Engineering (middle left), Electrical Engineering (middle center), Integrated Engineering (middle bottom), Software Engineering (bottom right), and Mechatronics Systems Engineering (bottom left). A thick purple horizontal line runs across the bottom of the collage, and a vertical purple line runs down the right side, intersecting the horizontal line at the bottom right corner.

Mechanical Engineering

Civil Engineering

Chemical Engineering

Electrical Engineering

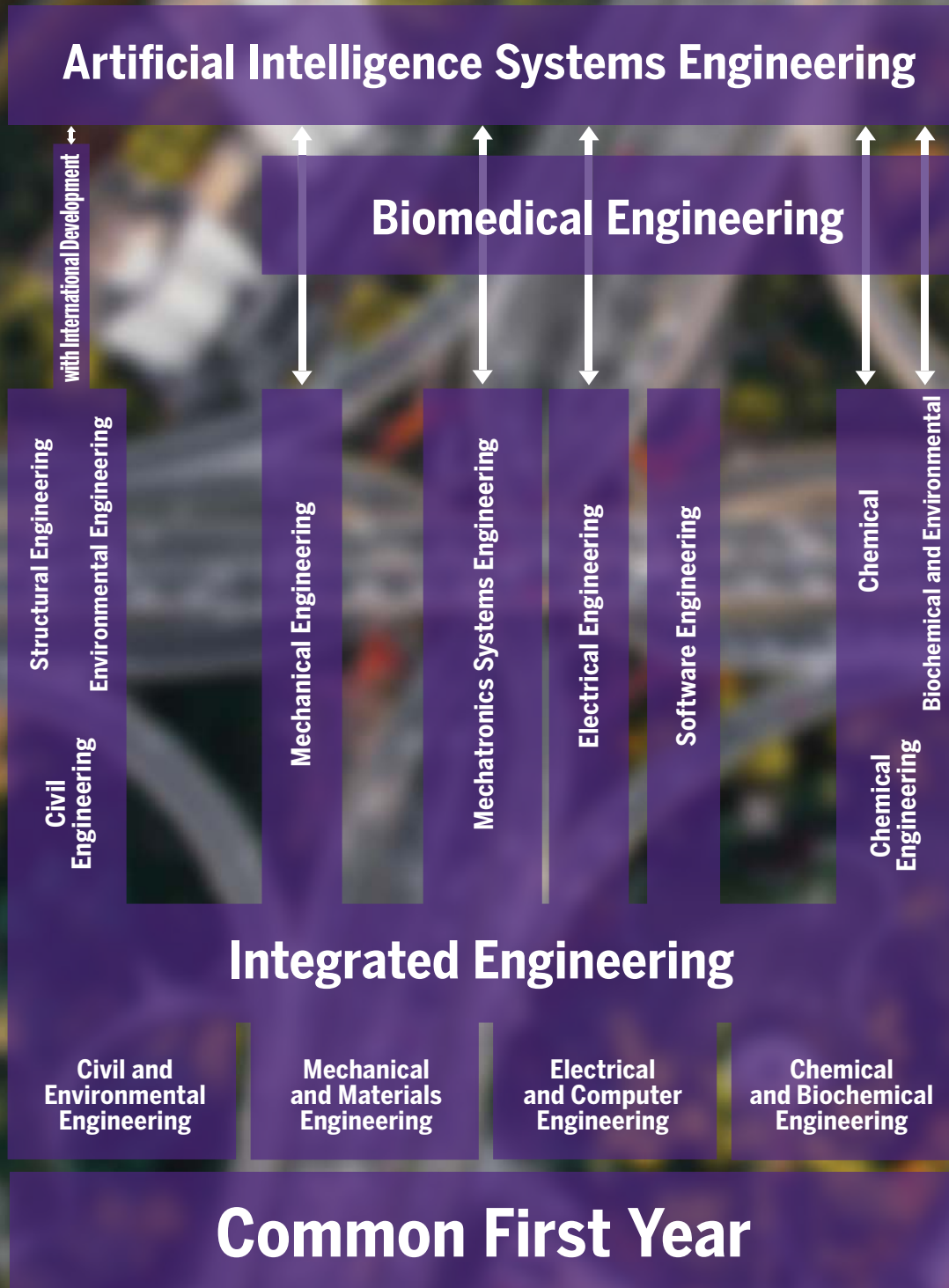
Integrated Engineering

Software Engineering

Mechatronics Systems Engineering

ANSWER THE CALL

FORGE YOUR PATH



PROGRAM OPTIONS

Engineering the Future

Navigating Urban Sprawl with Integrated Transportation Solutions

If children were asked to draw, they would likely sketch rockets, fairies or dinosaurs. However, my younger self would have drawn a distinct, messy road map of my city. As time passed, my interest in maps transformed into a passion for transportation infrastructure. In high school, I became aware of urban sprawl, motivating me to address transportation challenges arising from city expansion.

Studying Civil Engineering and Business at Western University, I aim to design and implement inclusive transportation systems for expanding urban regions. My objective is to develop integrated and accessible solutions to meet the evolving transportation needs of North American cities.

Anthony De Rango

Civil Engineering
and Ivey HBA Student



CO-OP



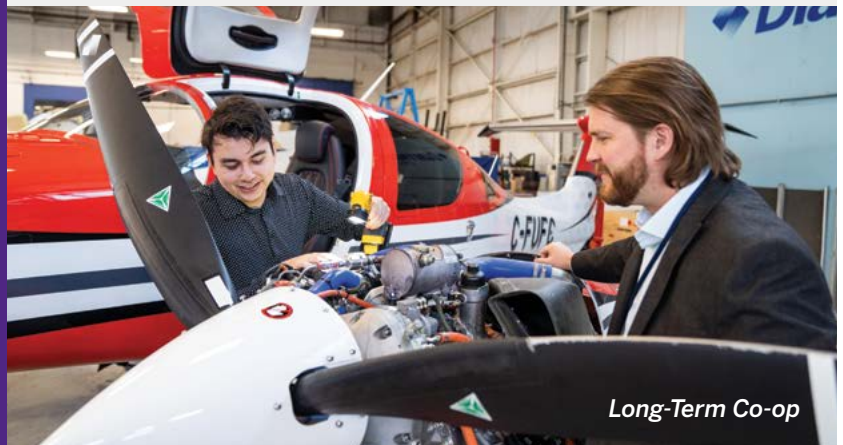
50%+
TAKE A CO-OP

89%
**EMPLOYMENT
RATE WITHIN
6 MONTHS OF
GRADUATION**

Unleash Your Potential Experiential Learning

To obtain a 'With Co-op' designation on your degree certificate, you must complete a minimum of 3 co-op work terms prior to the beginning of your final academic year. A common choice amongst students is to complete their 3 co-op work terms all at once by participating in the long-term co-op program, which they are eligible to apply for in the year prior to their final full-time academic year.

Students can get credit for up to 12 months of engineering experience gained from a co-op that is done after having completed more than 50% of their academic studies. This experience can be used towards the 48 months of work experience required for licensing as a Professional Engineer within the Province of Ontario.



Long-Term Co-op

Engineering the Future

Inspiring Innovation, Transforming Environments

Driven by my passion for chemistry, I chose chemical engineering for its broad scope and diverse career paths. While my primary interest lies in the environmental and biochemical aspects, I am equally fascinated by the biomedical side. What captivates me about this field is its applicability across various industries, integrating key elements of chemistry and biology. Answering the call, I am eager to contribute my knowledge and skills to address pressing challenges and make a positive impact on our world.

Sydney Buyze

Chemical Engineering
Student



JOIN THE ACTION



Western Baja SAE

Western Engineering is a Team Sport

Western Engineering boasts an active Students' Council – the Undergraduate Engineering Society (UES). The UES represents students' interests in faculty meetings, arranges engaging social events and provides valuable resources to support students throughout their academic journey.

Western Engineering offers a wide variety of experiential learning opportunities



Club Profile: Western Engineering Toboggan Team

A team of 24 Western Engineering Toboggan Team members participated in the Great Northern Concrete Toboggan Race, Canada's largest engineering competition. With the support of faculty, staff, sponsors and alumni, over 100 undergraduate engineering students dedicated nine months to designing an innovative concrete toboggan. Their efforts were rewarded as they emerged as winners. Enhance your learning experience and pursue your passions by joining student clubs and teams at Western Engineering.

"Becoming involved in clubs, such as the Women in Engineering Club and Engineers Without Borders, was one of the best decisions I made in first year. It allowed me to expand my social circle with likeminded peers and develop both technical and non-technical skills."

Abby Di Laudo
Civil Engineering Student



Engineering the Future

Uniting Chemical Engineering and AI for Sustainable Solutions

During my childhood, I witnessed the environment depleting and felt helpless. The local impacts of global warming and urbanization sparked my interest in understanding the effects of climate change on species and their habitats. Research revealed the extent of the earth's destruction, prompting me to question how I could contribute. Encountering influential female engineers at outreach events in high school showed me the transformative power of engineering. This realization motivated me to pursue Chemical Engineering in university. There, I recognized the significance of innovative approaches, which led me to pursue a combined degree in Chemical and Artificial Intelligence Systems Engineering.

Eesha Sharma

Chemical and Artificial
Intelligence Systems
Engineering Student



GLOBAL OPPORTUNITIES

Engineers are expected to work in a global context where they encounter situations that demand a wider perspective, effective cross-cultural communication and interdisciplinary collaboration. At Western Engineering, there are numerous pathways available to equip you with the necessary skills for making a global impact.

- Faculty-Led Study Abroad (ES3310)
- Civil Engineering and International Development Program
- Engineers Without Borders
- International Experiences



Casa Batlló ES3310 | MME4490

RESEARCH WITH IMPACT



At Western Engineering, we passionately pursue research that not only benefits society but also promotes sustainability. Our unwavering dedication to cutting-edge research forms the foundation for undergraduate education and graduate student training. Our esteemed engineering faculty members ardently delve into projects that push the boundaries of knowledge

in their respective fields, all while incorporating sustainable practices. By fostering strong ties between academia and industry, we provide our students with a holistic education that empowers them with the skills and knowledge necessary to create a significant and sustainable impact on the world.

- **Accelerated Masters Program**
- **Undergraduate Summer Research Award**

Engineering the Future

Nurtured by Diverse Cultures, Fueled by Curiosity

My childhood was unique, starting in Brampton and then moving to Nigeria at the age of nine. This experience exposed me to diverse cultures, fostering my appreciation for diversity and curiosity. I developed a fascination for science and logical reasoning, constantly seeking knowledge. Choosing engineering as my career path has allowed me to express myself and apply learned concepts in innovative ways. From a young age, I have admired massive structures and aircraft, fueling my ambition to understand the inner workings of the world. With a creative mindset, engineering provides the perfect path for me to transform my thoughts into tangible reality.

Enoch Olusanya

Civil Engineering
Student



ALUMNI

Creating Leaders

Michael Zawalsky (BESc/HBA '14) Young Alumni Award Winner

As the head of CPP Investments' Portfolio Value Creation team, Michael oversees a diverse asset portfolio valued at \$100 billion. Renowned for his impact-driven approach, he actively champions the rights of the LGBT+ community through his involvement with Out Investors. Michael holds dual degrees in Integrated Engineering and an Ivey HBA, where he achieved remarkable academic success.

His achievements include being awarded both the Integrated Engineering Gold Medal and the HBA Gold Medal. During his time at Western, Michael served as the president of the Undergraduate Engineering Society and held various other leadership positions. Reflecting on his experiences, Mike emphasizes, "The lessons I learned at Western Engineering, both inside the classroom and through extracurricular involvement, have propelled my career forward." Despite being in the early stages of his professional journey, Michael serves as an inspiration and role model for aspiring engineering professionals.



INNOVATION

Bringing Innovation to Life

Anita So (Integrated Engineering Student)

Anita doesn't just want to conduct excellent research; she wants to conduct impactful research. When she discovered the exorbitant cost of manufacturing assistive devices for individuals with mobility challenges, she recognized an opportunity to make a difference. What if walkers could be produced using 3D printing technology and recycled plastics instead of expensive materials?

"I was astonished by the high price of these essential items that people depend on. It has unacceptable implications for individuals on fixed incomes or living in poverty. Change is imperative," said Anita So.

From conceptualization to design, Anita applied her engineering expertise and problem-solving skills to create a prototype that will significantly reduce the cost of these assistive devices. This development is a crucial step in addressing mobility issues in countries with limited access to affordable healthcare.



Engineering the Future

Innovating Technology for a Better World

After initially pursuing Medical Sciences in my first year in the Faculty of Science, I realized that my true calling resided at the intersection of scientific analysis and creative design. This realization prompted me to switch to engineering. This transition has empowered me to pursue my passion for advancing technology in an open, accessible and sustainable manner, with the aim of addressing urgent global challenges and enhancing the lives of people worldwide. I am excited to embark on this innovative journey and create a positive impact through engineering.

Cameron Brooks

Electrical Engineering
Student



SCHOLARSHIPS



The Linamar Scholarship

They have a plan.

They have ambition.

For themselves.

For the world.

This incredible scholarship supports up to 10 female students entering Honours Business Administration (HBA1) with the intention of completing the dual degree program in Engineering and Ivey (BESc/HBA) with the following:

- Half the cost of tuition for the remainder of your undergraduate degree
- Access to a summer co-op position with Linamar Corporation
- An employment opportunity at Linamar Corporation upon the conclusion of your degree

enguwo.me/Linamar

Canada Wide Scholarships



National Scholarship



Schulich Leader Scholarships



Other Scholarships

NOTE YOUR DEADLINES

**FA
LL**

Applications open on the Ontario Universities' Application Centre

**WIN
TER**

OUAC application deadline

Ivey AEO application deadline

Scholarship deadlines

**SUM
MER**

Earliest date Ontario universities can require a response to an offer of admission from a student currently enrolled in an Ontario high school

Residence placement questionnaire and prepayment deadline

Tuition fee deadline

Please follow the QR Codes for more information.

Note: Students interested in possible preadmission to Biomedical Engineering should complete the short, hyperlinked survey found within Western Engineering section of the OUAC website.

Visit: enguwo.me/Ivey-AEO



Scholarships help make the transition to post-secondary more affordable.



Important Dates & Deadlines



Residence



The first-year tuition fee deadline is in early August for guaranteed admission into Engineering. Payment after this date will only ensure admission if there is still space in the program.



INNOVATION • COMMUNITY • SUSTAINABILITY

THIS IS WESTERN

ENGINEERING



WE'RE
GLAD YOU
ASKED

Upcoming Events

- Fall Preview Day
- Spring Open House

Information for Parents

enguwo.me/future-students

Connect with Us



Book a Tour
of UWO



Book a
Virtual Tour



Speak with an
Ambassador

HAVE ADDITIONAL QUESTIONS?

UNDERGRADUATE SERVICES

Spencer Engineering Building, Room 2097

Western University

London, ON CANADA N6A 5B9

519.661.2130

futurewe@uwo.ca | eng.uwo.ca

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