



Delegate Package

Ontario Engineering Competition 2025

January 24-26, 2025
McMaster University

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Land Acknowledgement

OEC 2025 recognizes and acknowledges that McMaster University is located on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the ‘Dish with One Spoon’ wampum agreement.

Welcome to OEC 2025!

Congratulations on qualifying for the Ontario Engineering Competition 2025! This year, the competition is hosted by McMaster University in Hamilton, Ontario. A little more about the competition itself— since its inception in 1980, OEC has been a 3-day annual event that gathers students of all disciplines to solve complex, unique engineering problems. Over the years, it has evolved to include 9 different competition categories in which competitors demonstrate their technical knowledge and innovative problem solving skills to present to judges. The first and second place teams at OEC 2025 will advance to the Canadian Engineering Competition (CEC), which will be hosted by Dalhousie University in March.

The Organizing Committee is excited to invite you to the city we live and breathe to participate in this prestigious and distinguished event. During your weekend of competitions and networking, our team will be working hard to make your stay comfortable and fun. Please read this document carefully as it will help you prepare for OEC 2025 and ensure everything goes smoothly.

Competition Theme

This year's theme, "**Solutions That Last**", focuses on creating designs that stand the test of time, addressing pressing issues in ways that minimize the need for future redesigns or replacements. Competitors are tasked with building solutions that emphasize longevity, sustainability, and resilience, taking into account long-term implications and ensuring their designs continue to provide value over time. As you tackle this challenge, remember that your goal is to create engineering solutions with enduring impact—solutions that don't just meet today's needs but anticipate and adapt to tomorrow's challenges.

A Message from the Co-Chairs

On behalf of the entire organizing committee, we would like to personally welcome you to this year's Ontario Engineering Competition! We are thrilled to have you here at McMaster come January, and you have a lot to look forward to—this annual province-wide event brings together the highest-ranked students from 17 different schools across Ontario. Not only will this competition allow you to take what you have learnt in classrooms and clubs and apply it to topical challenges, it will also enable you to meet both driven students like yourself and representatives from a range of prominent engineering companies over the course of the weekend.

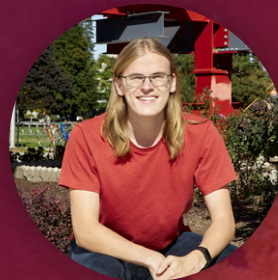
From an optimized schedule to a diverse food selection, we are proud to say that our competition has been tended to by a diligent team that worked tirelessly to implement initiatives that improve the competition experience for everyone involved. We hope you enjoy our beautiful campus and take advantage of everything Hamilton has to offer you. We look forward to meeting you all at OEC 2025 – until then, feel free to reach out to either one of us at any point if you have any questions or just want to say hi.

See you soon,



Ayesha Basu

Ayesha Basu



Luke Schuurman

Luke Schuurman

Sponsors

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Pre-EDI Quiz

Watch 2 short videos prepared by ESSCO's VP Advocacy concerning concepts related to EDI at [this link](#). There are 2 sections comprising 5 questions each.

YOU MUST GET 100% ON THIS QUIZ TO PARTICIPATE AT OEC.



Schedule



Check out the schedule [here](#)!



PEPSICO

PepsiCo Canada, one of the country's top 100 employers, is home to iconic brands like Gatorade, Tropicana, Lay's, and Quaker. Committed to sustainable growth through its Winning with Purpose vision, the company focuses on sustainability, diversity, community support, and healthier product options.

We are currently seeking:

- Supply Chain interns for summer, winter, and fall terms, with term lengths ranging from 4 to 8 months.
- New grad candidates for Supply Chain roles, with interviews happening on an ongoing basis.

To apply, please email your resume directly to pfccambridgerecruitment@pepsico.com

About Hamilton

Hamilton is Canada's 9th, and Ontario's 3rd largest city by population, with a plethora of industrial background. As a port city and a large manufacturing section, Hamilton boasts nicknames such as **Steeltown** and **the Hammer**.

While Hamilton is filled with hustling industrialism, the true beauty of the city lies within its natural landscape. Having more than **150 waterfalls** in the area, Hamilton is known as the **Waterfall Capital of the World**. Hamilton sits around the Niagara Escarpment, a **UNESCO Biosphere Reserve**.

A few facts about the city:

- The very **first Tim Hortons** location opened up in Hamilton in 1964 - although the location looks much different now compared to 60 years ago, it's still up and running, ready to serve their customers
- The **Hamilton Farmers Market** has been running since 1837, and is a popular spot to grab fresh produce, meat, baked goods and delicious, fresh-prepared meals
- The **Royal Botanical Gardens**, just outside Hamilton, is Canada's largest botanical garden, with both an indoor greenhouse and outdoor gardens and nature trails
- Every September, Hamilton hosts **Supercrawl**, one of Ontario's largest art and indie music festivals, featuring three days of free concerts and art installations
- Hamilton is home to the **Hamilton Tiger-Cats football team** and the **Canadian Football Hall of Fame**. (Fun fact: Hamilton is twinned with Pittsburgh, PA and our two football teams use the same colours!)
- Hamilton has been a popular filming location for movies and TV shows, including **The Handmaid's Tale, The Queen's Gambit, The Umbrella Academy, X-Men, Nightmare Alley, Star Trek: Discovery, Titans, and Crimson Peak**

Venue: Downtown Hammer

Sheraton Hotel (905) 529-5515 116 King St W, Hamilton, ON L8P 4V3

The hotel for the two (or three) nights of the event.



Hamilton Convention Centre Banquet Hall 1 Summers Ln, Hamilton, ON

Our closing gala and award ceremonies venue for Saturday night.



Venue: McMaster Campus

All facets of the competitions will be held here: designing, testing, presenting, and judging.



Venue: McMaster Campus

Thode Library

This will be the primary location for the competitions on Friday.



Burke Science Building

This will be the primary location for presentations and judging on Saturday.



Venue: McMaster Campus

John Hodgins Engineering Building

This building will be used for meals, Career Fair, and other events.



Gerald Hatch Centre

This building will be used for various events, meals, and some fun!



Emergency Contact Information

- Campus Security Phone Number
 - **905-522-4135** from an external number
 - Extension **88** from campus phones
- Contact information of the Conference Chair(s)
 - Ayesha Basu - yeesha on Discord
 - Luke Schuurman - luke_s_ on Discord
 - Please reach out through the official OEC Discord server, not personal DMs.
 - Both: oecc@essco.ca
- 911
- Instructions for the best method to contact emergency services per location (ex. If in an emergency on campus you may get help faster when using a campus phone than when dialing 911 on your cell phone)
 - Please dial extension 88 when on campus so that campus security can direct emergency services on campus
 - 911 is the best number to call elsewhere in Hamilton
- Please use 988 for any crises related to mental health challenges

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THE NEXT EVOLUTION OF
NUCLEAR IS TAKING FLIGHT

Incident Response

If any small emergencies or complaints occur during the competition, please know to make an incident report to the Incident Response Committee as soon as possible. If it is a serious emergency, please call 911 immediately.

The Incident Response System shall be a form created by the Incident Response Committee and made accessible to all delegates at an ESSCO Conference during the Conference and up to 3 days afterwards. The form shall include the following fields:

- 1.Name of Reporting Individual
- 2.School of Reporting Individual
- 3.Name(s) of the Individual(s) or Organization Involved in the Incident (or description(s))
- 4.Incident Date and Time
- 5.Incident Details
- 6.Incident Witness(es), if appropriate
- 7.Contact Information (Optional)
- 8.Whether or not the Reporter is comfortable being contacted by the IRC

More information can be found on the incident response form linked below:



[Incident Response Form Link](#)

Activities on Campus

	Saturday, January 25th
10:00 AM	Greenhouse (20 people)
11:00 AM	Greenhouse (20 people)
12:45PM	Planetarium (35 people)
1:00PM	Greenhouse (20 people)
1:45PM	Planetarium (35 people)
2:00PM	Greenhouse (20 people)
3:00PM	Planetarium (35 people)

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Ontario Society of Professional Engineers



Ontario Society of Professional Engineers



Transportation Information

To help you travel conveniently throughout the event, a **PRESTO card** will be provided upon competition registration at the Sheraton Hotel. This card allows for **free travel on the HSR system**, ensuring an easy and cost-free commute between the hotel and McMaster University campus. All buildings and venues are wheelchair accessible, and the terrain between bus stops and event locations is flat, with no significant undulations, making it suitable for individuals with mobility aids.

Hotel Parking

Parking is available at the Sheraton Hamilton Hotel in the underground garage at **your own expense**.

When checking into the hotel, request a parking pass. This will come at a cost of **\$15.95/day** for the duration of your stay. You may come and go an unlimited amount of times with this pass.

McMaster Campus Parking

For parking on McMaster Campus, there are no in-and-out privileges; each time you come and go you will have to pay again.

Day	Parking Lot	Rate Before 4PM	Rate After 4PM	Total Cost
Friday	Lot M or P	\$8 (daily rate)	\$4 (flat rate)	\$12
	Lot I	\$20 (daily rate)	\$8 (flat rate)	\$28
Saturday	Lot M or P	\$4 (all day rate)	N/A	\$4
	Lot I	\$8 (all day rate)	N/A	\$8

How to Bus to Campus

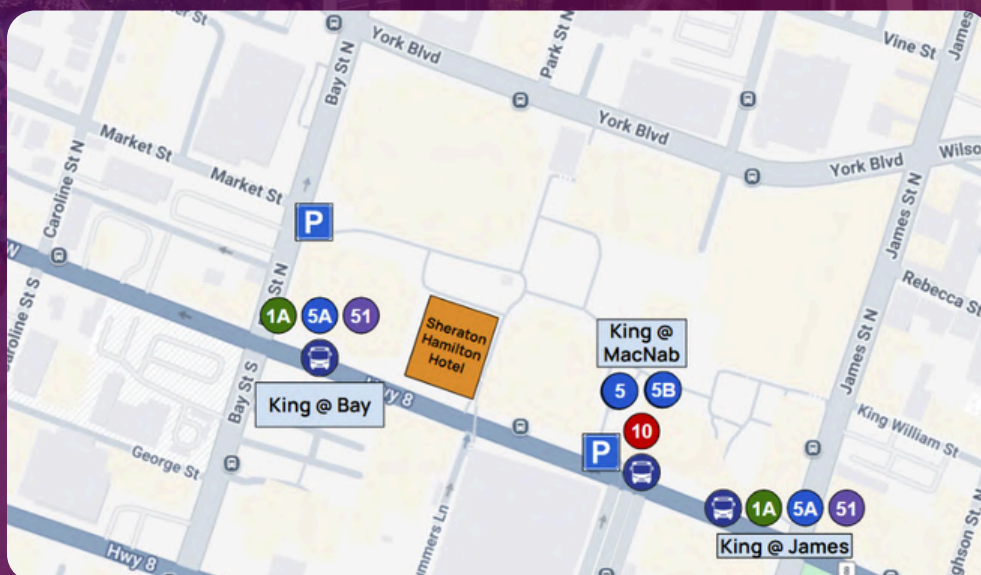
You have multiple HSR bus options to reach McMaster University. All routes stop near the Sheraton Hotel and drop off close to the competition venue:

1. HSR Bus 5A, 1A, and 51

- **Route:** Meadowlands Terminal or West Hamilton Loop via McMaster University)
- **Pickup:** King at Bay or King at James
- **Drop-off:** Sterling at University or University opposite Life Sciences
- **Approximate commute time:** 20 minutes

2. HSR Bus 10

- **Route:** B-Line to University Plaza
- **Pickup:** King opposite Frank A. Cook Terrace
- **Drop-off:** Main at Emerson
- **Approximate commute time:** 20 minutes



From any drop-off point, follow the event signage to reach the competition venue. The walking distance from bus stops to the competition venue is minimal, and the route is accessible for all participants, including those using mobility aids.

Important Notes

- PRESTO cards will be distributed during competition registration.
- Attendees are responsible for their transportation to the Sheraton Hotel on Friday and for their return home on Sunday.
- For additional details, check the HSR bus schedule.

Hotel Instructions

Hotel check-in and competition registration will take place at the **Sheraton Hamilton Hotel**:

- **For delegates arriving Thursday night (8PM - LATE):**
 - You will complete your **hotel check-in upon arrival** on Thursday night. On **Friday morning**, return to the lobby to complete your competition registration.
- **For delegates arriving Friday morning (10AM - 12PM):**
 - Both **hotel check-in** and **competition registration** will be completed simultaneously upon arrival.

During check-in, inform the front desk that you are part of the OEC event. If parking is required, notify the staff, and a parking pass will be provided, at your own expense.

Room assignments will be pre-arranged based on the preferences submitted in your registration form. **The first person in your room must provide a credit card for any potential damages during the stay.** The deposit charged to the credit card will be around \$100. You may be charged up to \$600 if you are not using a credit card. If this is of concern, please reach out to us.

At the competition registration table, you will receive your **name tag, PRESTO card** for free HSR transportation, and a welcome bag filled with event swag.

What to Bring

To ensure a smooth and stress-free weekend, competitors are encouraged to bring the following items:

- Laptop, Charger
- Adapter to HDMI (if applicable)
- Pens/Pencils
- Notebooks
- USB Drive
- Copies of resume
- Water Bottle
- Comfortable walking shoes
- Patches and swag for trading
- Casual attire for Friday
- Business casual attire for Saturday
- Semi-formal attire for Saturday night
- Clothes for travelling home on Sunday
- Bathing suit (if applicable for hotel pool)

Competition Supplies

Each competition may have unique resource requirements. Please review your competition's package to confirm what you need to bring versus what will be provided.

Important Notes

- Follow the event signage in the hotel to locate the registration area.
- OEC organizing committee will be available to assist with any questions during check-in and registration.
- A **Quiet Room** and a **Multi-Faith Space** will be provided on McMaster University Campus throughout the event

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Competitions

Junior Design



Patrick Molka



Jasan Rubes



Elliot Evans

First and second-year competitors design solutions to real-world engineering problems, presenting creative and practical solutions under time and resource constraints.

Senior Design



Kieran D'Souza



Alex Bartella



Kabir Gupta

Competitors use multidisciplinary knowledge to create a technical solution to advanced engineering problems and present a functional solution under time and resource constraints.

Re-engineering



Prisha Bhanot

Competitors improve existing concepts or designs to enhance existing functionality under time and resource constraints.

Programming



Baoze Lin



Kyle Hagerman

Competitors must design the best software solution to a complex computational challenge, while maximizing correctness and achieving minimum execution times.

Debate



Lydia Pedersen



Patricia Owen

Competitors present nuanced arguments in favor of or against impromptu resolutions, going head-to-head against other students in a battle of logic and rhetoric through multiple rounds of debate.

Bio-engineering



Kirsten Espe



Zara Khan

Competitors must develop creative solutions to bio-engineering problems based on a narrative with complications.

Innovative Design



Nuha Fahad



Melody Yang

Competitors bring independent projects from outside the competition, which may include capstone projects, to present to the judges.

Communications



Alexis Quilatan



Kylie Gun

Competitors present on an engineering topic regarding its economic, environmental, and social impacts in a way that the general public can understand.

Consulting



Liliana Patru



Joshua Keown

Competitors present analytical solutions to a multi-dimensional engineering challenge, all while considering the social, environmental, technical, and economic impacts of their solution to the client.

Organizing Committee



Ayesha Basu
Co-Chair



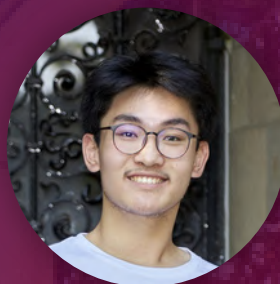
Luke Schuurman
Co-Chair



Connor Morrison
VP Corporate
Relations



Kartik Chaudhari
Director of
Sponsorship



Andy Tang
Director of
Sponsorship



Dabeer Abdul-Azeez
Director of
Sponsorship



Aryan Naik
VP Competitions



Simone Ocvirk
VP Competitions

Organizing Committee



Jessica Li
VP Finance



Joonseo Lee
VP Competitor
Relations



Leanne Chen
VP Marketing



Chantal Luo
VP Marketing



Jibin Mathew
VP Logistics



Jenna Harrison
VP Logistics



Ahmed Khaleel
VP Technical



Muhammad Zaka
VP Technical

Discord Server



Join the OEC 2025 Discord server [here!](#)

Thank you!

We look forward to your participation at OEC 2025.

Contact

Email: oec.competitors@essco.ca

Website: oec-cio.ca

LinkedIn: linkedin.com/company/oec-cio/

Instagram: [@oec.cio](https://www.instagram.com/oec.cio)