

# **Chapter News**

# Winter 2025 | Windsor-Essex Chapter

# Chair's Message



Dear Members of the Windsor-Essex Chapter,

It has been my pleasure for the past year and a half to serve as your Chair for one of the most dynamic and engaged chapters in our region. It is a privilege to represent you, and I am committed to ensuring fairness, inclusivity, and consistency while representing your voices to the regional council.

Over the years, our chapter has grown stronger through engaging discussions, insightful events, and the remarkable contributions of our members and volunteers. The diversity of our activities continues to reflect the evolving needs and interests of our engineering community.

This newsletter is a celebration of our collective achievements, made possible by the tireless efforts of our volunteers and contributions of our dedicated board members for whom I am deeply grateful.

As we continue to navigate different changes, including changes to the licensure process, I remain confident that our shared passion for engineering will guide us forward. Together, we can promote continuous learning, inspire future engineers, and uphold the values of integrity and innovation that define our profession.

I welcome your thoughts, ideas, and feedback. Please feel free to reach out to me directly at <a href="helsayed@peowindsoressex.ca">helsayed@peowindsoressex.ca</a>. Your input is invaluable as we work together to shape the future of engineering in our community.

Thank you for your continued commitment to the PEO Windsor-Essex Chapter. Your participation is key to driving innovation and achieving excellence in our profession.

Best regards,

Hanan El-Sayed, PhD, P.Eng.

Chair, PEO Windsor-Essex Chapter

# **Upcoming Events**

**PEO/OACETT Curling Bonspiel** 

Location: Beach Grove Golf and Country

Club

Date: March 1<sup>st</sup>, 2025

Contact: Juliana Otero, P.Eng. (peng.julianao@gmail.com)

**Description:** Annual curling tournament

**Chapter Annual General Meeting** 

Location: Hellenic Cultural Centre

**Date**: March 4<sup>th</sup>, 2025

Contact: Hanan El-Sayed, P.Eng. (helsayed@peowindsoressex.ca)

**Description**: Annual meeting of the Chapter

and Board Elections

**Engineering Month Luncheon** 

Location: Caboto Hall Date: March 28<sup>th</sup>, 2025 Contact: Anna Good, P.Eng. (ms.godo@gmail.com)

**Description:** Annual engineering month committee celebration and awards

presentation

Windsor Regional Science, Technology

and Engineering Fair Location: St. Clair College

**Date:** April 12, 2025

Contact: Sean McCann, P.Eng. (spmccann13@hotmail.com)

**Description:** Annual science fair judging;

many judges needed!

PEO W-E Chapter 65th Golf Classic

Location: Kingsville Golf & Country Club

**Date**: June 26<sup>th</sup>, 2025

Contact: Juliana Otero, P.Eng. (peng.julianao@gmail.com)

**Description**: Annual golf tournament

Ritual of the Calling of an Engineer

Location: St. Clair Centre College Centre

for the Arts

Date: July 9th, 2025

Contact: Sean McCann, P.Eng. (spmccann13@hotmail.com)

**Description:** 100<sup>th</sup> Anniversary of the Iron Ring Ceremony (will obligate summer 2025 graduating class; all obligated engineers are

welcome to come and celebrate our

engineering community!)

Follow our **Facebook page** (PEO Windsor-Essex), subscribe to our **email blasts** by updating your online PEO profile, or check out our **Website** for more photos, updates, and upcoming events!

# **PEO Golf Classic Highlights**

The 64<sup>th</sup> Annual PEO Golf Day was held on June 27<sup>th</sup>, 2024, at Kingsville Golf and Country Club with a full field of 18 teams (72 golfers) participating on one of Windsor-Essex's finest courses. As usual, we ordered a beautiful day, and it came through amazingly. A big thanks to the staff at Kingsville for providing a delicious dinner following the round.

Congratulations to the winners with an overall low gross score of 60 that included Matt Baird, Richard Letts, Tyler Jobin and Brett Salter from Tandem Engineering. Other prizes were given out for the closest to the pin, longest drive, and longest putt. Landmark Engineers won four out of five top scores, a close run for capturing the most prizes. Erika Krutsch (Landmark) and Fonda Asparakis (Tandem) added to the excitement for each of their firms winning closest to the pin. Congratulations to the winners of these awards and our various raffles. The PEO Windsor-Essex Chapter Board sincerely appreciates participation from engineers and industry partners, for continuing to build on the success of this tournament in the coming years.





Our deepest gratitude goes to the prize donors for their steadfast support and generosity in maintaining the success of this event, and they include: Intrepid General Ltd, Landmark Engineers, Vertical Engineers, Tandem Group and Peralta Engineering.

We would like to acknowledge the hard work of the Golf Day organizing subcommittee for putting this day together. This year's subcommittee consisted of our volunteers Rick Patterson, P.Eng., Dan Castellan, P.Eng., Stacey McGuire, P.Eng., and Juliana Otero, P.Eng. Congratulations on a great event! Hope to see you next year for the 65<sup>th</sup> Annual Golf Day, so mark your calendars for June 26, 2025!!



# "Getting Closer to the Stars" - Hallam Observatory Tour Highlights

Have you ever wondered what it would be like to visit the distant planets, stars and nebulae in-person? With the present-day technology, humans will not get there in our lifetime, but it is a possibility in the future. So, the next best approach, is getting there indirectly via telescope. Using our naked eyes, we can see approximately 3,000 light-years away, while telescopes allow us to visually travel millions of light-years away. This is exactly what our fellow engineers, family members and friends did on July 12 and October 4, 2024, during our visits to the Hallam Observatory in Comber.



The volunteers at the Observatory are members of the Royal Astronomical Society of Canada (RASC) and manage and operate their 14" diameter telescope and associated structures on their property. Their team provide visitors a view of the universe that makes them feel a little closer to those objects in the sky. Our event allowed us to clearly see the deep craters on our nearby moon, as well as the rings on Saturn. Volunteers also educated our attendees with a scaled model, to illustrate how far away each planet in our solar system was positioned relative to Earth. Several of the Observatory members were onsite with their

own personal telescopes for their own viewing pleasure, but also allowed our members to see some other unique views of the night sky at various directions. Mike Mastronardi, P.Eng. has been a long-time volunteer for our chapter, as well as a longtime member of the RASC. He was also onsite to help educate the visitors about our local solar system and beyond. Additionally, through the technology used by one of the RASC members who is an experienced astrophotographer, we had the opportunity to download onto our phones, some of the great views observed through his cameraconnected telescope. This included some super photos of the Andromeda Galaxy (M31) and Messier Galaxy (M51).



Overall, the two visits to the Observatory were relatively calm and quiet but extremely interesting and intellectually stimulating, leaving memories that will last as long as the distant galaxies we observed. Many thanks go out to the RASC team, including Brian Simpson, Starr Livingstone, Steven Pellarin and Mike Mastronardi, P.Eng., for providing our members the opportunity to experience something unique. The Technical Programs Committee will consider hosting this as an annual event, so keep your eyes open for future star viewing dates.

# **New Licensure Process Presentation Highlights**

The PEO Licensure Process Event 2024 took place on July 25th, 2024, at the University of Windsor. With over 100 attendees, including graduate students, engineering interns, and recent graduates, the event provided invaluable insights into the updated PEO licensing process. This event served as a perfect opportunity for aspiring engineers to gain essential knowledge about licensure, network with peers, and engage with the professional engineering community. Stay tuned for more events that empower and support the engineering professionals of tomorrow!

#### Some key highlights of the event included:

#### **New Licensure Process Update**

The focal point of the event was a detailed presentation on the new PEO licensure process, led by Tracey Caruana, P.Eng., Manager of Engineering Intern Programs and External Relations at PEO, and Sami Lamrad, P.Eng., Engineering Intern and Student Programs Coordinator at PEO. Attendees learned about the competency-based assessment, now central to PEO's licensing requirements, which evaluates applicants' professional engineering experience. Tracey and Sami also explained how candidates must now gain their required 48 hours of work experience before applying for licensure.

#### **Engagement and Q&A**

Throughout the evening, attendees were deeply engaged, asking numerous questions about the new process and how it would impact their career progression. This

interactive dialogue allowed participants to present their concerns directly to PEO staff and ensure their understanding of the new requirements.



#### **OSPE Membership Benefits**

In addition to the PEO presentation, Ismail Hersi, Member Services Coordinator at OSPE, delivered an enthusiastic talk on the benefits of becoming an OSPE member. His presentation covered networking opportunities, resources such as job fairs, and advocacy work that OSPE offers.

#### **Networking and Refreshments**

In between presentations, participants were treated to 40 large pizzas and refreshments, allowing them to enjoy casual networking.

The Windsor-Essex Chapter extends its gratitude to the entire Education Committee's volunteer team, for their dedication in organizing such a successful event. The chapter looks forward to hosting more events, to further support the professional growth of future local engineers. For those interested in more details about the event or future opportunities, please contact Aakash Bagchi, P.Eng., at <a href="mailto:aakashbagchi@proton.me">aakashbagchi@proton.me</a>, or the chapter's website.

# **Windsor-Essex Wastewater Treatment Plant Tour Highlights**

On August 20, 2024, the Technical Programs Committee had the pleasure of hosting a multi-facility wastewater treatment plant tour, consisting of visits to three locations (Little River, Lou Romano and Essex). The weather was perfect with a few clouds to keep the summertime temperatures at a reasonable level. The 26 attendees traveled from one plant to another via a bumpy school bus ride, while partaking in a light lunch during their travels. At each location, our group was guided and educated by several professionals who worked at the plants, describing the intimate workings involved with treating our wastewater, before being transferred back into the natural environment. We learned about each stage through which the wastewater passes for incrementally reducing its contaminants level and improving the water quality. We also learned about the high-tech engineering involved in each of the stages for purifying the water, including observations of ultraviolet light system in action near the end of the process.



Here are some key learning points from our trip. Did you know 72% of homeowners

have admitted to flushing certain items down the toilet that should have been disposed in other ways? If you can believe it, this includes diapers, cleaning wipes, medicine, paper towels, feminine hygiene products, etc. Even though there currently are no regulations defining what is flushable, the general rule of thumb is that a product is flushable, only if it can break down in water within seconds.



Therefore, this only includes human sanitary wastes and toilet paper. So next time you make a trip to the washroom, please be considerate to those working in the wastewater treatment facilities, by not discarding unwanted items through the sanitary waste system. As well, do not rinse within your sinks, any fats, oils, grease, paints, stains, varnishes, unused chemicals and medicines, since they can potentially clog the sewer lines. Additionally, it was explained to us how those fancy little labels on the fruits and vegetables we eat daily, are a significant nuisance for the staff when removing other water impurities, because those stickers tend to accumulate and clog up the filtration systems.



Fortunately, the innovative engineers at the plants have developed a unique brush-based cleaning system, specifically for removing those pesky little labels. So next time you eat a juicy apple, orange or pear, please remember to discard that sticker directly into your waste bin, because it has caused many a nightmare for your fellow engineers to remove from our wastewater streams.



The Technical Programs Committee would like to sincerely thank the tour guides at each plant, especially the Plant Managers which included Sergio Mannina (Little River) and Kevin Cabana (Lou Romano). They provided detailed presentations on the inner workings of their plant systems and addressed numerous questions. As well, a special thanks goes out to Jake Renaud, P.Eng. (Little River and Lou Romano) and Kevin Renaud, P.Eng. (Essex) who oversee and direct the operations at their facilities. The Technical Programs Committee looks forward to hosting similar tours soon, to help better educate our chapter membership.



# Fall 2024 Licence Certificate Presentation Highlights

Receiving your P.Eng. licence certificate is the culmination of years of dedicated preparation and training. Recipients deserve to be proud of this achievement, which marks their official entry into the engineering profession in Ontario. It is equally exciting for the chapter board to share in this moment, as we present the certificates to the newly certified engineers in front of their family and peers.



The fall licence ceremony presentation was held the evening of October 1, 2024, at the Hellenic Cultural Centre of Windsor. There were 72 people in attendance including special guests.

As part of the festivities, the keynote speaker, Iman Yavari, P.Eng. from AI Integrated Systems, delivered a very informative presentation on the challenges of electric vehicles and associated fire safety concerns.

Congratulations to all the recipients, especially those that could attend the ceremony, as illustrated in the picture below, and included:

- 1. Calvin Anthony Love, P.Eng.
- 2. Deepak Nagpal, P.Eng.
- 3. Milena Stevanov, P.Eng.
- 4. Kristine Wilkinson, P.Eng.
- 5. Sameer Bari, P.Eng.
- 6. Bailey Erica Purcka, P.Eng.
- 7. Laila Sultana, P.Eng.
- 8. Samer El-Abassi, P.Eng.
- 9. Michael Oliver Hermo, P.Eng.
- 10. Matthew Kenneth Lemmon, P.Eng.
- 11. Sumeetkumar Shaileshbhai Patel, P.Eng.
- 12. Liam Simone, P.Eng.



# **ISEYL 2024 Highlights: Inspiring the Next Generation of Engineers**

PEO Windsor-Essex Chapter Hosts
Successful "Innovation Station Engineering Your Life" Event
The Windsor-Essex Chapter hosted its
annual "Innovation Station - Engineering
Your Life" event at Devonshire Mall on
October 19th, 2024. Now in its 13th year,
this event has inspired thousands of students
since its inception in 2011, making a
significant impact on youth engagement in
STEM and engineering.



#### **Event Highlights**

This year's event was a resounding success, with even more bridges, participants, and exhibits than last year. We saw an impressive turnout, with increased attendance from teachers, parents, and community members.

- **Bridge Building Competition**: 140 students registered, with 80 bridges competing in a lively showcase of creativity and engineering skills.
- Interactive Exhibits: The event featured innovative displays from St. Clair College, University of Windsor, and various engineering organizations, including:

- St. Clair College Robotics and Concrete Canoe Teams
- OACETT (Ontario Association of Certified Engineering Technicians and Technologists)
- WRSTEF (Windsor Regional Science, Technology, and Engineering Fair)
- WDBA (Windsor-Detroit Bridge Authority): Providing updates on the Gordie Howe International Bridge project
- University of Windsor Engineering Teams: Featuring Aero Team, IEEE, Hyperloop, Mars Rover, and Formula Electric
- Meet and Greet with Engineers:
   Students had the chance to interact with engineers, ask questions, and explore the world of engineering in depth.



#### **Impact Since 2011**

Over the years, ISEYL has inspired many elementary and high school students to pursue careers in engineering and

technology. We are proud to see former attendees now studying engineering or working as professionals, with many attributing their career choice to this event. ISEYL continues to bridge the gap between engineering and the community, by engaging students, parents, teachers, and the public in discussions about the importance of STEM education.



#### **Future Vision**

As we plan for the future, our aim is to reach even more students, particularly those from

underrepresented communities in the STEM fields. We will continue to introduce new features and partners to keep the event dynamic and engaging.



#### Event Chair, Dr. Sardar Asif Khan,

P.Eng., shared his comments: "The enthusiasm from students, teachers, and parents drives us to make the next ISEYL event even more impactful. Thank you to everyone who made this year's event a success, especially all the many volunteers on the ISEYL subcommittee. We look forward to seeing you again in 2025!

# Run for Fun Highlights

It was another successful year for the chapter members taking to the streets running, walking, hiking, or biking. The Social Programs Committee is proud to bring this event year after year to promote health and fitness within the chapter community. Thousands of kilometers of walking/running/cycling were logged by our 29 participants this year. We are very excited that many members decided to join our STRAVA Club for logging their activities.

The 2024 Run for Fun statistics are so impressive and include the following:

- 29 members participated in the event (compared to 16 in 2023).
- Over 700 hours of activities logged during the 9 week challenge period.
- Over 7,000km covered in running/walking/cycling activities (farther than the distance of travelling from Vancouver to Halifax!).
- 31,819m of elevation change (3.5 times the elevation of mount Everest!)



# Run For Fun 2024



# **University of Windsor Activity Week Booth Highlights**

The Windsor-Essex Chapter Board likes to keep an eye on our budding young engineering community at the University of Windsor. And any chance we get, we like to take advantage of the opportunity to meet and intermingle with the students. On September 24, 2024, we had such an opportunity when the University of Windsor's Engineering Students Society (EngSoc) invited the chapter to operate a booth during the annual Activity Week within the E.D. Lumley Centre for Engineering Innovation on Campus. The chapter was involved last year, and we had the chance to meet a few dozen students. But this year, we met hundreds of students who were all interested in knowing more about the new PEO licensure process, as well as details on our own personal life experiences as engineers in the field. The EngSoc did a superb organizing job this year with at least ten different booths for the undergraduate and graduate students to visit and learn more about the various engineering clubs and coop programs available at the University of Windsor. The students were even provided tasty pancakes and cotton candy, as they transferred from booth to booth, while collecting signatures on their activity cards for winning some interesting EngSoc swag.

Overall, the event was a win-win-win for EngSoc, the chapter and especially the

students who became more educated about the interesting opportunities available for their personal growth, as they pursue their future engineering careers. We congratulate the EngSoc for their success at coordinating such a professionally organized event! We also thank our volunteers (Dan Castellan, P.Eng., Al Conle, P.Eng. and Sean McCann, P.Eng.) for providing guidance and answering the many questions from students about the engineering profession. We look forward to participating again next year!



# **Empowering Woman in Engineering Salsa Social Highlights**

Fifteen PEO ladies danced the night away again on September 27<sup>th</sup>, 2024 with another exclusive salsa class, organized by the chapter's Empowering Women in Engineering (EWiE) subcommittee. This was the second session hosted by the subcommittee this year at the impressive Shō Art Studios on Monmouth Road in Windsor.

The incredible Denise (@artofdancewindsor on Instagram) is a staple in the Salsa & Bachata community, and she ensured everyone was prepared to enjoy upcoming salsa dance events in the Windsor area! Wearing either sneakers or high heels, we dedicated this salsa social to boosting

confidence, immersing oneself in the music, and cultivating our personal dance style. EWiE was thrilled to share this exciting event with such an amazing group of ladies, dancing to the rhythm of Pachanga and Chachacha by famous Son Cubano and Buena Vista Social Club hits.

Thank you to all participants for bringing such vibrant energy to the class!
Additionally, thank you to Juliana Otero,
P.Eng., and the EWiE subcommittee team for organizing this event.



# **Volunteer Recruitment Night Highlights**

The Windsor-Essex Chapter Board recently organized a highly successful Volunteer Recruitment Night on November 7<sup>th</sup>, 2024 at the Amalfi Panini Café, located at 465 Erie St. East. The event was focused on recruiting new volunteers and engaging the attendees within the local engineering community, particularly recent engineering student graduates.

The evening was meticulously coordinated by Juliana Otero, P.Eng. who ensured that all logistical aspects were in place. The event consisted of almost 20 attendees, including both new faces and familiar ones who had previously engaged with the chapter online. The venue provided a cozy atmosphere with sandwiches and salads, while a cash bar offered coffee and drinks.

The event kicked off with a well-prepared PowerPoint presentation, which involved a collaborative effort by our chapter leaders. Sean McCann, P.Eng. as the Chair of the Technical Programs Committee, highlighted the committee's goals, needs, and past and future planned activities. Aakash Bagchi, P.Eng. as the Education Committee Chair, updated the attendees about the recent changes to the EIT program and how it has influenced his committee's activities. He also elaborated on the past and future planned events. Juliana Otero, P.Eng. as the Social Programs Committee Chair, explained details about all the fun events organized by her committee, as well as how different committees collaborate on events where their goals overlap. Kevin Girard, P.Eng. as the Nominations Committee Chair,

explained the important role his committee plays for the board elections, as well as all the various awards presented to students and fellow engineers. To conclude the presentations, Wanda Juricic, P.Eng. as a board member for the Windsor Regional Science, Technology and Engineering Fair, explained the dire need for volunteers, both on the board for fund raising and coordinating the various organizations involved in the fair, as well as the numerous judges required to judge the hundreds of student projects. The need is there, and vour help is definitely wanted, whether it simply be as a science fair judge or volunteering on one of the committees presented during this this recruitment night.

After the presentations, there was a question-filled networking session, allowing attendees to interact with the committee chairs and discuss their interests. The event's success was evident in the enthusiastic discussions and the energized atmosphere as people departed.

This Volunteer Recruitment Night event not only succeeded in attracting potential volunteers, but also fostered a sense of community among local engineers. The chapter looks forward to welcoming new volunteers and leveraging their expertise to plan and coordinate exciting events in the upcoming year for all our PEO members. For more information about volunteering opportunities with the Windsor-Essex Chapter, please visit the chapter website, or contact Juliana Otero, P.Eng. (peng.julianao@gmail.com).

# **University of Windsor Engineering Student Highlights**

The University of Windsor's Engineering Students Society is a student-run representative organization that serves the more than 1,100 students enrolled in undergraduate engineering studies at the University of Windsor. The society aims to enhance and support the engineering student experience, by offering various services, events, and resources, while representing students' concerns and voices.

Since the Spring of 2024, the society has hosted several successful events, some of which include the following:

#### **Soccer Tournament:**

The Engineering Students Society hosted a summer soccer tournament with 75 players on six teams, featuring round-robin and elimination matches. The event brought together engineering and non-engineering students, raising nearly \$500 for future community activities.



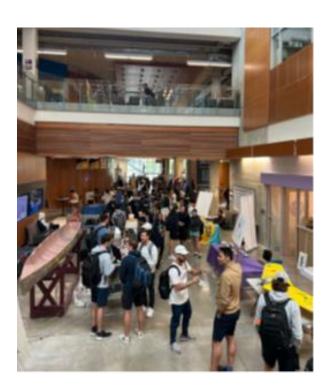
#### Frosh Week:

A fun-filled week for 88 first-year students, Frosh Week included team games, a cardboard boat race, volleyball, an involvement fair, and social events to help new students integrate, build friendships, and develop an interest in engineering. This led to higher engagement in other engineering activities, like Academic Week and the Windsor Engineering Competition.



#### **Academic Week:**

Targeted at first-year students, Academic Week featured clubs and resource organizations showcasing their activities. Over 650 students interacted with 15 club booths during Club Days, boosting club memberships and engagement. The Battle of the Clubs had eight clubs competing in activities to attract new members, with the Concrete Canoe team winning a \$500 prize.



# Windsor Engineering Competition (WEC):

The Engineering Students Society is presently organizing WEC, which precedes the Ontario Engineering Competition at McMaster University. Categories include Junior and Senior Design, Programming, and a new Parliamentary Debate. Winners will advance to the Ontario Engineering, and potentially the Canada Engineering Competition.

# 'Exceptional Role Models' - Athena Scholarship Celebrates 25 Years

(Excerpts taken from Windsor Star online article located at

https://windsorstar.com/news/localnews/exceptional-role-models-athenascholarship-celebrates-25-years)



Windsor's Athena Scholarship program marked a milestone anniversary on November 1<sup>st</sup>, 2024, with funding for four high-achieving women scholars. The annual luncheon, now in its 25th year, awarded \$5,000 each to Aya Abu-Libdeh, EIT, Crystal Bryan, Claire Buxton, and Nina Jabbari.

"For 25 years, this scholarship program has embodied the Athena philosophy, which maintains that by elevating individuals with potential and strong values, we help them become exceptional role models," said Loretta Stoyka, president of the ATHENA

Scholarship Fund Windsor. "The belief is that, through their example, others will be inspired to strive for excellence. Windsor is at the forefront of this scholarship program and continues to enhance the opportunity each year."

Aya Abu-Libdeh, EIT completed a bachelor of applied science in electrical engineering with honours in 2022 at the University of Windsor. By the end of this year, she will graduate with a master of applied science in electrical engineering, also from UWindsor. She has also served as chair of the Institute of Electrical and Electronics Engineers (IEEE) Windsor-Essex Chapter, holding STEM outreach events for elementary and high school students.

Additionally, Aya has been an active volunteer for the PEO Windsor-Essex Chapter on the ISEYL event organizing subcommittee for the last 3 years.

The Athena scholarship was created in Windsor in 1999 and is supported by donations from private citizens, corporations, academic institutions, and community organizations. Scholarship recipients are selected for community involvement, potential for leadership, academic excellence, and inspiring women to reach their full potential.

# Windsor Woman Sharing Her 3D Printing Passion to Inspire Others

(This article has been copied in whole from the CTV News online article located at <a href="https://windsor.ctvnews.ca/windsor-woman-sharing-her-3d-printing-passion-to-inspire-others-1.7093044">https://windsor.ctvnews.ca/windsor-woman-sharing-her-3d-printing-passion-to-inspire-others-1.7093044</a>)

If she can dream it, Dora Strelkova can likely make it a reality — as long as there's a 3D printer nearby. Dora Strelkova, 23, is a master's student in the University of Windsor's engineering department and the woman behind the "Strelkomania" YouTube channel. Through extensive videos, she teaches viewers how to design and print intricate items step by step.

"It started as a COVID hobby. Like a lot of people, they wanted to find something to pass the time when we were in lockdown," she said. "I didn't entirely have a friend group who enjoyed the same things I did in terms of making things. I wanted to post online to build a community of people who saw all the hard work that went in and all the design challenges and things like that."

Some of her 3D-printed creations include headphones (minus the electronic components inside), earrings with a QR code linking to her YouTube channel, and various types of shoes — runners, high heels and moon boots — along with custom-made hair curlers. "I'm working on a video where I try and do my hair using 3D printing," said Strelkova.

But her favourite creation this year was a Lego-style miniature figurine of herself. The idea came after she saw a campaign by Texas-based Reinvented Magazine, which planned to send 1,000 mini-Lego figures to the edge of space to promote women in STEM fields. Strelkova emailed the magazine to ask if a figurine of herself could be sent as well if she printed it herself. The answer was yes. "It's a prime example of the effectiveness of just asking and trying something," she added.

Strelkova, who manages all her 3D printing independently, said she was inspired to pursue STEM after joining a FIRST Robotics team in high school. Jaeleen Koscielski, volunteer and alumni manager for FIRST Robotics Canada, said the program has helped increase the number of women engaging in science, technology, engineering and math. "We've seen that progression over the years of more girls taking on opportunities in the STEM side — building and designing the robot and trying out programming," she said.

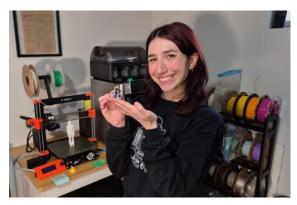
However, while individual FIRST Robotics teams are seeing more women join, Koscielski said women and people from other minority groups still hesitate to immerse themselves in STEM, unless they see their peers involved. "If you can't see it, you might not be it. If you're not seeing other women in the field, you might not feel like you belong there," said Koscielski. "So, it's about trying to change that narrative so women and these minority groups understand they can do anything that they want. Sometimes, they need that allyship to pull them up first."

As for Strelkova, she said her YouTube audience is growing steadily, reaching a point where she's been recognized in unexpected places. "Recently, there was an outreach event at UWindsor and a young

elementary student came up to me. She was asking about 3D printing, and I told her that I have a YouTube channel. I showed her and she said she had actually seen most of my videos," said Strelkova. She was also recognized at "Rapid TCT," North America's largest additive manufacturing and industrial 3D printing event. "It's hard to believe that people recognize me for some of my niche videos," said Strelkova.

But recognition isn't what drives her, she said. Instead, it's about inspiring other creators and engineers worldwide who may discover her videos. "I think it sets a perfect example — not only of women in 3D printing or women in engineering — but that if you have the drive to achieve something, it's bound to happen," she said. "It's just the patience of time and effort that goes into it."

Dora has also been an active volunteer for the PEO Windsor-Essex Chapter on the ISEYL event organizing subcommittee for the last 3 years.



Dora Strelkova is a Master's student at the University of Windsor. Outside of class time, she puts together YouTube videos on how to print all sorts of 3D-printed items. (Sanjay Maru/CTV News Windsor)



This pair of headphones was printed by Strelkova, minus the electronic components inside. (Sanjay Maru/CTV News Windsor)



Dora Strelkova printed this LEGO-style figurine of herself and submitted it to Reinvented Magazine. Earlier this year, the publication sent 1,000 figurines to the edge of space to promote women in STEM. (Sanjay Maru/CTV News Windsor)



Strelkova has figured out how to print running shoes, including the shoelaces. She creates custom designs using CAD software. (Sanjay Maru/CTV News Windsor)

#### **COUNCIL ELECTIONS:**



### **2025 PEO Council Elections**

An election will be held from January 27 to February 24, 2025, to elect Councillors to the 2025-2026 Council of Professional Engineers Ontario.

PEO is seeking all licence holders to vote for candidates in the upcoming election, since your vote is important for helping to fill the positions on the 2025–2026 PEO Council. Your elected Councillors are expected to reflect the diversity of the profession and implement their knowledge about board governance and professional self-regulation.

PEO Councillors provide direction and control governance functions, to ensure PEO fulfills its mandate of governing its licence holders and regulating the practice of professional engineering in Ontario. Your vote for the right nominees will help make this happen; so please ensure to vote, since your profession is counting on you.

The full list of nominated candidates, their platform information, elections schedule and miscellaneous elections documents are included on the PEO website, so please visit PEOVOTE.ca **before** you vote!