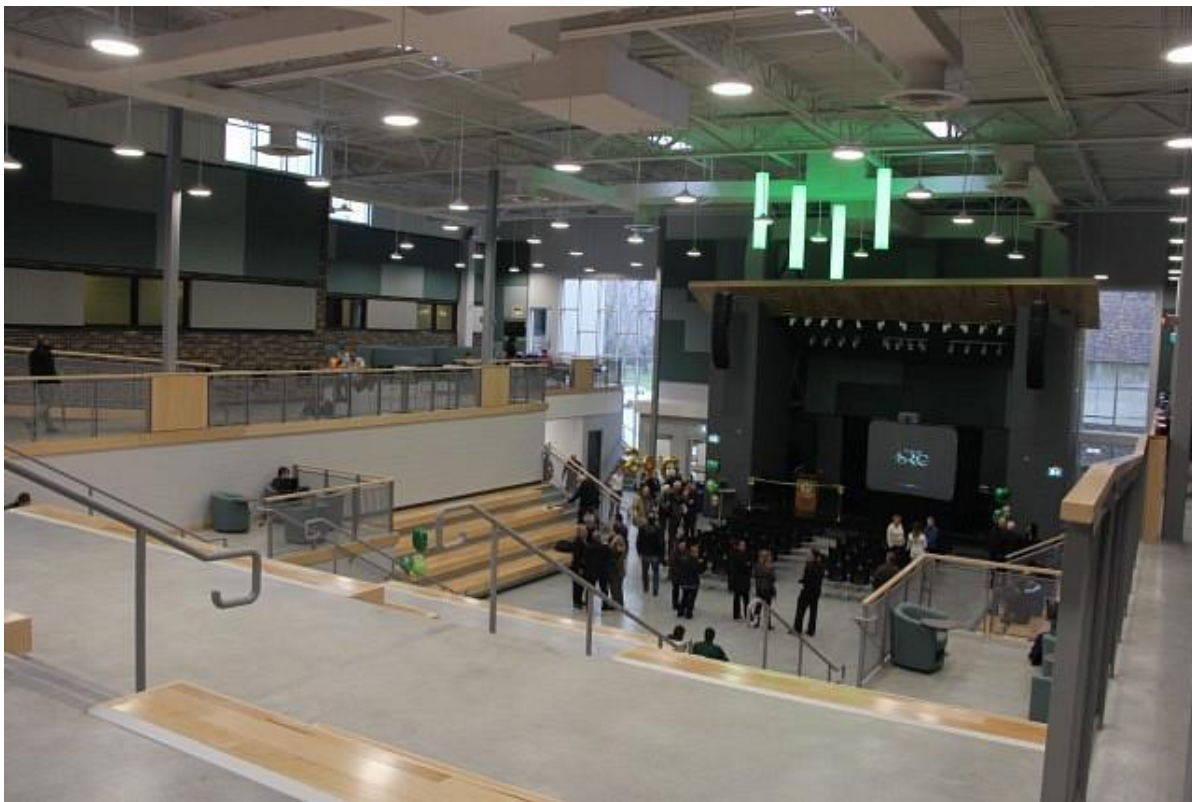


# Innovation Station - Engineering Your Life (ISEYL) 2018

---

Professional Engineers Ontario (PEO) Windsor-Essex Chapter's flagship event, Innovation Station - Engineering Your Life, is back with new and added features at a novel location. This year's ISEYL will be held on **Saturday, March 3<sup>rd</sup>, 2018 in the Dr. John A. Strasser Student Life Centre (SLC) at St. Clair College, South Campus.**

The event has been held at the Devonshire Mall since 2011. Due to the ongoing massive renovation at the mall, the ISEYL organizing committee searched alternative venues while making sure that the new location offered more attractions for its young participants, as well as added convenience for the parents. With ample free parking and Capri's Pizza on site, the (ISEYL 2018) event will be organized in a "live entertainment" format by taking advantage of St. Clair College facilities.



There will be two onsite educational tours of the state of the art engineering labs led by expert professional engineers. A team of Consulting Engineers, Industrial Leaders and trendsetters will be at the event to provide guidance, advice and inspiration to our generations of engineers to come.

The focus of the “Bridge Busting” competition, which is a recurring part of ISEYL, is for the participating students to build a strong bridge with popsicle sticks and glue for achieving the maximum load to weight ratio. This year’s “Bridge Busting” expects to register more than 100 bridges. Elementary and high school students preregister for the competition on line through the following link: <https://www.eventbrite.com/e/peo-windsor-essex-iseyl-bridge-busting-competition-2018-tickets-42315501805> . There will be two sessions to test bridges this year on March 3rd at the Student Life Centre (St. Clair College) with check-in times of 9:00am and 1:00pm, respectively. Bridges will be registered in the following categories and multiple awards supplied to the best bridges in each category:

<b>ISEYL- Bridge Busting Categories</b>	
<b>Grade</b>	<b>Category/ Division</b>
<b>Grades JK - 3</b>	<b>Pre-Novice</b>
<b>Grades 4 - 6</b>	<b>Novice</b>
<b>Grades 7 &amp; 8</b>	<b>Junior</b>
<b>Grades 9 - 12</b>	<b>Secondary School</b>

A test rig specially designed, built, and operated by a Professional Engineer allows students to observe their bridge being slowly loaded, while monitoring the progress on a large screen display presenting the ever-increasing load.

Each check-in session for the “Bridge Busting” preregistered competitors will begin with a short talk and presentation about how bridges support and transfer loads. At the completion of each presentation, the focus will shift to the bridge testing rig. One by one, each bridge builder will be called to the stage based on the assigned number, and will get to see their bridge loaded until it fails. While most would think that after hours of assembly work, competitors would be sad to see their creation shatter to the ground, it is expected that they will smile as they watch the load climb and then see a sudden and spectacular failure. After each failure, a licensed Structural Engineer will explain the reason of failure and provide tips to improve the design and construction for next year. This short “engineering lesson” serves as a source of deep internal satisfaction and keeps the students excited for the future, by developing a better understanding of the design issues leading to failure. Our goal with competitors is not to simply bring them back year after year, but rather get them excited enough that they would desire to pursue technology-related career.

This day of fun and excitement will be focused on providing our youth with a glimpse of engineering and its applications. Analogous to the past, key players of engineering and technology, and our traditional partners, including OACETT, St. Clair College, University of Windsor, Canada South Science City, Windsor-Detroit Bridge Authority, and FIRST Robotics, will make this event a success. New partners include Mad Science and SchoolHouse Chess.

University of Windsor students once again will bring their much-improved SAE Mini Baja off-road vehicle and drones to this year’s event. The Baja team of university students, equipped with their vehicle, will share their experiences and knowledge with the youngsters.

Students from St. Clair College will bring in their portable CNC machine, which makes custom tags, for those who wish to have them. While interested in receiving these tags and creating on the spot their own, custom designs, those in attendance will be able to watch the CNC process in action.

Several other technology displays, aside from the engineering-themed tours, will be presented by St. Clair College engineering technology students, faculty, and members of the Automotive Product Design Club.

Keeping the tradition, the Windsor-Detroit Bridge Authority (WDBA) is also expected to join us this year. They are a hot topic of discussion in the media these days, due to the scope of their federally funded project. After the successful completion of the Herb Gray Parkway, the new objective is a Government-owned bridge linking Canada and USA. Showing great support for our industry and our mandate to educate the public at large on the importance of the engineering profession to our community, WDBA will maintain their presence during this event and will bring forward their plans for the upcoming infrastructure project.

Our long-time friends from Science City are also expected to return this year with many more hands-on experiments as compared to that of last year. CSSC has a legacy of bringing unique and interesting items that are converted into fun science experiments and experiences at the event.

To expand on the talents offered by the next generation of Engineers, the FIRST Robotics teams will also bring new and interesting robots to the ISEYL event this year. They will share the information about their competitions and their robotic units. Crowds will have a treat to see their robots in action again this year.

The Windsor-Essex Chapter Board of PEO is extremely excited about this event and working together with our fellow engineering professionals, to help students learn more about engineering! Mark your calendars, since we look forward to your participation.

Asif Khan, P.Eng., PMP

Chapter and Event Chair