



CO-OPERATIVE
EDUCATION

Faculty of Engineering and Applied Science

SYNERGIES

THE CO-OP NEWSLETTER

CELEBRATING 50 YEARS OF ENGINEERING

In 2019, the Faculty of Engineering and Applied Science will be celebrating 50 years of engineering education in the province and we would like it if you could help us celebrate.

The first class of students began the new engineering degree program in the Fall of 1969, prior to this it was a diploma program. In 1974, Memorial's first class of 76 students graduated with a bachelor of engineering degree in electrical, mechanical or civil engineering. Now, 50 years later, we have seen significant growth and offer degree programs in six disciplines.

Our celebrations will kick off with a networking event on Aug. 9 at the Emera Innovation Centre, Signal Hill campus. Alumni are encouraged to plan their individual class reunions for Aug. 10, and alumni and their families are invited to the S.J. Carew (Engineering) Building on Aug. 10 for a fun-filled open house event. We look forward to celebrating our 50th anniversary with you. If you would like to be kept up-to-date, please fill out our online [form](#) or contact Coreen Bennett at coreenb@mun.ca or 864-6222.

"We are proud of the contributions of engineering to the province and our past accomplishments that have placed us among the premier engineering schools in Canada"
Dr. Greg Naterer, Dean of Engineering

MEMORIAL'S MAKERSPACE

JORDAN ROCHE, WORK TERM 2, COMPUTER

Makerspace is part of The Commons within the QEll Library. Its main function is to infuse learning with technology and engineering into non-STEM disciplines, such as using virtual reality (VR) to view the topography etc. for a geography lab, or creating board game pieces for the Department of English.

As part of my work term at Makerspace, I developed a means of training The Commons student staff through VR. I created a training simulation using Unity, a game development environment; and SketchUp, a CAD software, which allowed us to create and import a virtual version of The Commons. When my time at The Commons was winding down, the simulation addressed many daily activities such as filling printers, doing rounds and answering questions from clients. The simulation was also a good proof of concept, meaning we could see this as a viable option for training in the very near future.

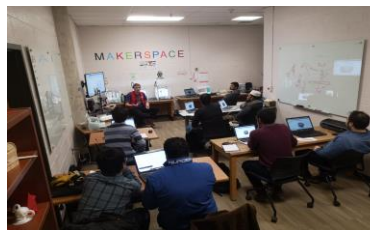


Figure 1: Makerspace Session
(submitted by Jordan Roche)

WINTER WORK TERM:

Jan. 2 –Apr. 26, 2019

Students are still available for the Winter Work Term!

SPRING WORK TERM:

Apr 29 - Aug. 23, 2019

Competition starts:

Jan. 10, 2019

Interviews start:

Jan. 21, 2019

WORK TERM AWARD WINNERS SPRING 2018

Daniel Thorsen

[C-CORE, St. John's, Work Term 1]

PEGNL Connections East Award

Shamus Brown

[EWB, Ghana, Work Term 4]

PEGNL W.W. Cossitt Award

Adam Brown

[Eastern Health, St. John's, Work Term 3]

Paul S. Batstone Memorial Scholarship

Andrew Rust

[Dept. of National Defence, Ottawa, Work Term 3]

Gosine Family Scholarship

click each award for more information

INNOVATION IN THE NORTH

CAROLANN HARDING, SMARTICE SEA ICE MONITORING & INFORMATION INC.

Innovation thrives on blending ideas and experiences. SmartICE is the world's first climate change adaptation tool to integrate Inuit knowledge of sea ice with advanced data acquisition and remote monitoring technology. It provides data-driven insights into local ice conditions, in near real-time, to inform safer travel. The system benefits public safety, food security and health and wellbeing. It also enables and supports economic activities, from mining, shipping and fisheries, to emergency response and national defense and was founded on bringing together people of different ages, skills and areas of knowledge.

With six active locations across the Canadian Arctic, and a dozen more expansion projects underway, this fall was the perfect time to invite a co-op student, Brady Walsh, into our operation, through Venture For Canada (VFC). Brady had the opportunity to work with technology, supply chain and lean manufacturing, while engaging with our Inuit operators and at-risk-youth who participate in our programming.

For our part, we benefited from Brady's fresh ideas and energy. His business-oriented mindset was at home in our organization, where creative problem solving is needed. As a new not-for-profit social enterprise, SmartICE was also grateful for the support VFC provided for Brady's placement.

We had an excellent experience through the VFC program – which provides wage subsidies to growing organizations and entrepreneurial training to post secondary students and I would recommend their program to other burgeoning businesses.

THINGS ARE HEATING UP AT MYSA!

LIAM CADIGAN, WORK TERM 6, ELECTRICAL

Mysa Smart Thermostats has been changing the landscape of the Canadian HVAC industry in recent months with their flagship product: a smart thermostat for baseboard heating. They design innovative smart home products to help consumers conserve energy. Engineering consists of front end and back end software development, embedded systems development, as well as electronics design and manufacturing. On an average day, the team might diagnose problems in a returned unit, evaluate a new feature to add to an upcoming release, or work on detailed designs to fulfill their planned product roadmap.



Figure 2: Mysa Thermostat
(submitted by Liam Cadigan)

The team has grown from 9 to 37 employees in 2018 alone. This year is set to be a big year as the company enters the design phase on multiple hardware products and implements several new software features. They run two 3D printers to prototype and have electronics test equipment available to ensure quality of products. On the software side, walls of thermostats are used to verify new firmware and feature releases. Mysa strives to help people save energy and money while providing them a world-class technology experience. Having a connection with their users and their values is very important!

SUMMER JOB FAIR

MARCH 8, 2019

The Landing (UC-3018)
Memorial University | 11am – 2pm

Recruitment/Networking
event for summer and part-
time work.

For more information or to
register for the event:

<https://www.mun.ca/student/student-success/work-experience/Summerjobfair.php>

MUN ENGINEERING OPEN HOUSE

MARCH 9, 2019

Engineering Building
Memorial University | 11am – 3pm

For more information:

https://www.mun.ca/engineering/community/programs/open_house.php

MUN ALUMNI EVENTS

Stay connected with alumni
events happening in San
Francisco, Calgary, New York
City and Houston!

For more information:

<https://www.mun.ca/alumni/events/>