



CO-OPERATIVE  
EDUCATION

Faculty of Engineering and Applied Science

# SYNERGIES

THE CO-OP NEWSLETTER

## ECEO GOES INTERNATIONAL WITH WACE

The World Association for Cooperative Education (WACE) is built on a membership of educators and employers from around the world. Memorial's Engineering Cooperative Education Office (ECEO) is now an institutional member and will be engaged in global partnerships leading industry and academic institutions committed to high quality programs, awards and recognition programs for students, faculty and alumni. This membership will also provide access to experiential learning research and conferences.

The ECEO is actively participating in what WACE has to offer for the benefit of the experiential learning for students, faculty and industry partners. Further, it is a pleasure to announce that Anil Raheja, Director ECEO, has been accepted to the Board of Directors representing Memorial's ECEO.

## STUDENT PUBLISHED

STEPHEN COLLINS, CLASS OF 2018, PROCESS

For my final work term in the fall of 2017, I accompanied several other students from MUN to The University of Petroleum and Energy Studies (UPES) in Dehradun, India. My research involved characterizing the reaction kinetics of a pyrolytic process. Pyrolysis is the thermochemical decomposition of a material in the absence of oxygen and is a popular method for producing environmentally-friendly biofuels. Groundnut shells, a common agricultural residue in India, was the feedstock.



Figure 1: Students in India  
(submitted by Stephen Collins)

Much of my work at UPES involved deriving thermodynamic parameters from experimental data, and by the end of the semester I had some conclusive results. The professor overseeing the project, Dr. Praveen Ghodke, recommended taking the research to a journal for publication. After several months I learned that The Journal of Environmental Chemical Engineering had

agreed to publish our work. I cannot think of a better way to conclude my engineering degree and encourage all students to look for less than conventional work term opportunities!

### FALL WORK TERM:

Aug. 20 – Dec. 19, 2018

**Students are still available  
for the Fall Work Term!**

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### WINTER WORK TERM:

Jan. 2 - Apr. 26, 2019

Job competition starts:

Sept. 13, 2018

Interviews start:

Sept. 24, 2018

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### SPRING WORK TERM:

Apr. 29 – Aug. 23, 2019

Job competition starts:

Jan. 10, 2019

## WORK TERM AWARD WINNERS - WINTER 2018

### MARK DUFFETT

[AOSL-FEAS, NL, Work Term 2]  
PEGNL Connections East Award

### JOHN ENNIS

[Ericsson, Texas, Work Term 5]  
PEGNL W.W. Cossitt Award

### ALEX KEATING

[DuXion Motors, NL, Work Term 3]  
Gosine Family Scholarship

*For more information on each award,  
click on the name of the award!*

## DREAMS CAN COME TRUE

ANGELA STACEY, WORK TERM 3, PROCESS

Few things in life are as incredible as walking through the doors of your dream job. You forget the challenges you faced and the times you were convinced this moment would never come.

From early childhood, I had a passion for safety in vehicles. I was an eight-year-old buying used car seats and dismantling them in the living room while I watched cartoons; I wanted to know how these devices saved lives. At 16, I was a volunteer with child passenger safety coalitions nation-wide. As a volunteer, I learned which child safety seats led the industry in terms of performance, design and function, and that they were predominately made by Britax Child Safety. I decided that this was where I wanted to work, and printed a job posting and pinned it above my desk. I knew I needed an engineering degree to get there.



Figure 2: Britax Car Seat  
(submitted by Angela Stacey)

This summer I finished my third work term as a member of the Advanced Engineering team at Britax headquarters in Fort Mill, South Carolina. The co-op program has provided an invaluable bridge between my education and my dream job. I am not sure where my passion for vehicle safety came from, but I will spend the rest of my life working to keep children safe, and the co-op engineering program at MUN has been integral in achieving this goal.

## GO NORTH

ZACK ROONEY, WORK TERM 1, MECHANICAL



Figure 3: In Class  
(submitted by Actua)

I spent my first work term with Actua travelling around the Great Canadian North. At Actua, I delivered STEM-based (Science, Technology, Engineering and Math) experiences to youth in primarily Indigenous communities.

During my first tour of the North I visited multiple schools leading workshops related to conductivity, animal habitats, simple machines, thermodynamics and aerospace. On my second tour I delivered science camps on plant and human anatomy, the chemistry of bubbles, the Northern Lights, robotics, computer programming, light and sound waves, deep-sea life,

aerospace, infections and diseases, mining, and artificial intelligence. The workshop and camp activities were hands-on as participants interacted with laptops, tablets, robots, microcomputers and coding software.

My favourite parts about this job can be summed up in three points: 1) Travelling around remote parts of Canada; 2) Teaching youth about STEM; and 3) Learning about the different cultures we have in Canada.

## WHAT'S HAPPENING THIS FALL

### CAREER FAIR

SEPTEMBER 26, 2018

The Field House, MUN  
St. John's Campus · 10 a.m.-4 p.m.

Register here:

<https://www.mun.ca/student/student-success/meet-employers/career-fair.php>

### ENGINEERING REUNION

OCTOBER 12, 2018

S.J. Carew Bldg., St. John's  
Classes of '78, '83, '88, '93, '98, '03 & '08

Register here:

<http://www.mun.ca/engineering/community/alumni/reunion/>

Contact: [Coreenb@mun.ca](mailto:Coreenb@mun.ca)

### TOAST TO HIRE LEARNING

NOVEMBER 22, 2018

Clovelly Golf Course  
100 Golf Course Rd, 8 a.m.-10 a.m.

Be a part of the annual Toast to HIRE Learning event!

Network with other employers and students and join in on discussions about recruitment, retention, etc. over breakfast.

For more information email:

[Co-operative Education Services Centre <cesc@mun.ca>](mailto:Co-operative Education Services Centre <cesc@mun.ca>)

### DID YOU KNOW...

Our founding Dean, Dr. Angus Bruneau, joined Memorial in 1968 and announced a new full engineering program at Memorial. Our first class of students entered a year of general studies in the Fall of 1968 and then began the new engineering program in the Fall of 1969. Next year we will celebrate our 50th anniversary of the Faculty of Engineering and Applied Science. Look for event announcements.