



CO-OPERATIVE  
EDUCATION

Faculty of Engineering and Applied Science

# SYNERGIES

THE CO-OP NEWSLETTER

## FIRST EDITION!

Welcome to the first edition of Synergies, the Engineering Co-operative Education Office's (ECEO) newsletter. Our goal is to continue to strengthen our partnerships with employers through sharing the importance and value of our students' experiences. Our newsletter will be published at the beginning of each semester, and we welcome any ideas for stories or other content you may have. We would like to thank our employers for their continued support.

## UPES: WORK TERMS IN INDIA

ANIL RAHEJA, Director, ECEO



Figure 1: Students at UPES in India (photo submitted)

in the areas of Energy, Infrastructure and Transportation and other growth sectors. The students were exposed to a vast array of experience within research and development, focusing in areas such as electronics, electrical power and energy, process laboratory research and mechanical/automotive engineering.

The partnership to-date has been a successful one, and UPES is keen on continuing to offer work terms for our students for the foreseeable future. Prof. Dr. Ugur Guven, vice president International Affairs at UPES stated, "Working with the Canadian students from Memorial University was quite satisfying for us, as we found them to be very competent, ready for challenges, enthusiastic and very motivated." This is an exciting venture, and we wish to thank faculty, staff and all who have been involved both at Memorial and UPES in supporting cooperative education!

For more information concerning UPES click [here](#).

This past term, Memorial's Faculty of Engineering and the University of Petroleum and Energy Studies (UPES) partnered to employ six work term students at their state-of-the-art campus in Dehradun, India. Established in 2003, UPES focuses on the requirements of the future, a wide spectrum of globally competitive industry aligned undergraduate, postgraduate and doctorate programs

"The travel and experience was something I could never have gotten in Canada ... I learned much through my supervisors, and can directly apply it to my next few semesters of school."

Chad Murphy, *student testimonial*  
[Mechanical, Work Term #3]

### WINTER WORK TERM:

Jan. 4 - Apr. 27, 2018

Job Competition Starts:

Sept. 14, 2017

Interviews Start:

Sept. 27, 2017

### FALL TERM DATES:

Aug. 21 - Dec. 15, 2017

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

### WORK TERM AWARD WINNERS - WINTER 2017

#### SARAH LEDREW

[Nalcor Energy, Work Term 1]  
PEGNL Connections East Award

#### ALEX DALLEY

[Exxon Mobil, Work Term 5]  
PEGNL W.W. Cossitt Award

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

### WHAT'S NEW IN THE ECEO?

The ECEO team is comprised of 13 academic staff members (ASM-CE) and six staff who help to prepare and mentor students on work terms. Our team places between 300-500 students per semester.

## DESIGN UNDER PRESSURE

TINA PUTT P.Eng, ASM-CE, ECEO



Figure 2: New shaft support stand  
(photo submitted)

Since 2007, Syncrude has partnered with MUN to provide over 140 co-op work terms. The majority of positions have been with the Equipment and Reliability Engineering Department in Fort McMurray, Alberta.

This past summer, Matthew Lane, a work term four mechanical student, assisted with the design of a compressor shaft support stand. He was tasked with reviewing a previous design to determine the load requirements for the stand. Under the strict deadline of the shutdown schedule, Matthew designed a new

support stand, keeping material availability and lead times in mind. With the guidance and mentorship of Gregory Downey (B.Eng), a graduate of Memorial's mechanical engineering program, the assignment was successfully completed and implemented, allowing compressor maintenance to continue as scheduled.

Matthew had the opportunity to work with trade personnel to develop maintenance procedures for an upcoming equipment overhaul. He contributed value to the team's projects and enjoyed the site work and learning about equipment reliability and maintenance.

"I was impressed with Matthew's thoroughness and confidence. It enabled him to quickly gain the trust of his co-workers. This allowed me to focus on other aspects of the maintenance event."

Gregory Downey

## ON DECK AT THE SHIPYARD

KAYLA JACKMAN, Irving Shipbuilding Inc., Halifax, Nova Scotia, Work Term #4

During my previous two work terms with Irving Shipbuilding Inc., I was lucky to be a part of a diverse team of Field Service Engineers supporting the construction of the first Arctic Offshore Patrol Ship (AOPS) of its class, the *HMCS Harry DeWolf*. My role on this team was to investigate structural and technical issues arising during the construction of AOPS and provide engineering solutions to the production staff to advance production. I worked in the office as well as on the production floor; assisting staff, surveyors, and technical personnel. This enabled me to physically see structural problems on the floor, and the opportunity to remediate the issues with the help of a 3D model and construction drawings.

I thoroughly enjoyed my work terms with Irving, mostly due to how much hands-on experience I gained from them. From this, I was able to learn the differences between correct and incorrect structural designs, as well as how to solve them and effectively communicate solutions to production.

My supervisors were extremely helpful throughout my work terms and were always available to answer any questions, while also allowing me to use my own judgment and experience to resolve technical issues. My experiences with Irving Shipbuilding Inc. have been positive, and I am excited to say I will be returning for another work term this fall.

Click the image for more information.



Figure 3: Arctic Offshore Patrol Ship (AOPS)  
Image: Irving Shipyards: [shipsforcanada.ca/our-stories](http://shipsforcanada.ca/our-stories)

## CENTRE FOR ENTREPRENEURSHIP

### COREEN BENNETT

Employment Relation Officer, ECEO

Memorial Centre for Entrepreneurship (MCE) officially opened in March 2017. This is a partnership between the Faculties of Business Administration and Engineering and Applied Science and is focused on promoting entrepreneurship. The Centre provides support to students, faculty and staff in developing their start-up business ideas.

Engineering co-op students can start a business as a qualified work term. To date, we have had 10 students who have successfully completed entrepreneurial work terms.

More information click [here](#).

## CAREER FAIR

SEPTEMBER 27<sup>TH</sup>, 2017

The Field House, MUN  
St. John's Campus • 10 am | 4 pm

[Register Here.](#)

## ENGINEERING REUNION

OCTOBER 28<sup>TH</sup>, 2017

Murray Premises, St. John's  
Classes: '82, '87, '92, '97, '02 & '07

[Register Here.](#)

## TOAST TO HIRE LEARNING

NOVEMBER 22<sup>ND</sup>, 2017

Clovelly Golf Course  
100 Golf Course Rd • 8 am | 10 am

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 visit Memorial's Career Development website or click [here](#).