



SCHULICH
School of Engineering

With 2020 coming to a close, we extend our heartfelt thanks and appreciation to our wonderful students, staff, and faculty for their hard work towards our shared mission of teaching, research, and knowledge dissemination.

This Newsletter summarizes some activities of our department over the last few months and announces what is coming up.

We wish you and your loved ones happy holidays and a very healthy and happy 2021. Here's to a better year ahead!

Our Students...



Geomatics Expo 2021

23rd Annual Geomatics Engineering Exposition
21 January 2021



From all of us at GESS, we are very excited to announce the 23rd annual Geomatics Exposition! In case you didn't know, every year GESS plans this expo to provide geomatics engineers from all years a networking opportunity with various companies in the industry. This is a fantastic opportunity for engineers in ALL years to learn more about geomatics engineering and all the cool stuff we can do! So, whether you're looking for an internship or a post-grad job, or if you're just trying to learn more about the industry, this is something you don't want to miss!

The Geomatics Exposition is planned to take place on January 21st, 2021. It will run from 9 AM to 3 PM with an hour-long lunch break from noon till 1:00 PM.


The expo will take place virtually, on a platform called Gather. Gather allows you to interact and speak with friends, colleagues, and industry alike using a virtual avatar. We encourage you to check out the live demo on their website here: <https://gather.town/>. If you're not too shy, we'd also encourage you to have a webcam so our industry representatives can see who they're talking to. We hope to see you there!

Dec. 11, 2020

Geomatics Engineering Students Society

Academic Year 2020-21



Nicholas Malbasa President	Eugene Lok VP Academic	Bryn Griffiths VP Events	Andrew Grab VP Finance	Carley Hopkins VP Internal	Mikko Ramos VP External
Apekhya Shrestha VP Communications	Eric Ho 4th Year Rep	Seema Mustaqeem 3rd Year Rep	Antoine Methot 2nd Year Rep	Teagan Drever Geomatics Exposition Co-Comm'r	Aaron Chen Geomatics Exposition Co-Comm'r
Maria Le Swiss Trip Co-Comm'r	Iffah Hamdan Swiss Trip Co-Comm'r	Carter Janssen NGC Comm'r	Mohan Lall Artistic Comm'r	Gregory Brewster Events Comm'r	Mac Dressler Events Officer
Christian Wildt Secretary	Enis Alushi UCEE Geomatics Engineering Rep				

GEOMATICS engineering Students Society 2020-21

Oct. 19, 2020

Geomatics Graduate Group

2020-21 G³ Council



On Monday, October 5th we were proud to announce that a new Geomatics Graduate Group (G³) council was elected for the 2020-21 academic term. As everyone is accustomed to hearing by now, this past year and the year to come have been, and will be, very different than we have

experienced before, and the operation of G^3 is no exception. Graduate students are notorious for being excessively introverted, even when in-person social interaction is possible. With a lack of in-person academic support from supervisors and peers, grad students are at risk of experiencing depression, anxiety, or other mental health issues from the lack of socialization. This year, it will not be possible for G^3 to host the same in-person recreational and entertainment events that we have enjoyed in previous years. Our first focus is on observing the limitations required to keep ourselves and our communities safe, however, we will not let this dull our efforts to promote a positive environment in which our graduate students can thrive academically and maintain good mental health. If anything, this year we must be more inspired and imaginative to buoy the spirits of our members.

This year, geomatics graduate students have elected a G^3 council which is prepared to accept this unprecedented challenge. Now, more than ever, we encourage you to stay involved in your communities – even at a distance – and we look forward to representing and working with our student body. You can get to know the 2020-21 members of G^3 through our bios below. Stay tuned to hear what we have planned for 2020-21!

Paul Gratton, G^3 President



Your 2020-2021 G^3 Council; Top Row: [Paul Gratton, Zahra Bagheriashena, Sina Kiaei]; Bottom Row: [Bahareh Yekkehkhany, Luis Rodriguez, Kelly Harke]

G^3 Council:

- President: Paul Gratton
- Vice President: Zahra Bagheriashena
- Treasurer: Sina Kiaei
- GRC Representatives: Bahareh Yekkehkhany and Luis Rodriguez
- Secretary: Kelly Harke

Sept. 29, 2020

Survey Camp COVID-19 edition

ENGO 501 - Field Surveys - Summer 2020



ENGO 501 – Field Surveys or survey camp is one of the highlights of the geomatics engineering degree at the University of Calgary. Normally, it is held at the Barrier Lake Field Station in Kananaskis, AB. Due to COVID-19 restrictions this year this was not possible. A 2020 version of survey camp was run in a hybrid mode: an online portion in August followed by group field work during Block Week in September. The course was co-instructed by Drs. Kyle O’Keefe and Ivan Detchev. Kent Jones and Paul Gratton served as teaching assistants, and Mohamed Elkholy as a temporary equipment technician. There were 33 students enrolled in the course.



Survey Camp 2020

From August 17 to 25 there were seven days of online instruction and lab work that started with instrument calibration with simulated data and creating a GIS to use for planning the field exercises on campus. The students then did planning and pre-analysis for four field exercises: cadastral

retracement, RTK for surveying and mapping, deformation, static GNSS and precise levelling exercises. Aaron Shufletoski, BCLS and Reid Eggar, ALS presented to the class through Zoom. Finally, we reviewed some field and COVID-19 safety. Students were asked for various submissions almost daily.

The most important outcome of the seven-day online portion of the course was the prep work (e.g., computations, reconnaissance mapping, pre-analysis, and in general planning) for the field. The field work portion of the course took place between Mon, Aug 31 and Fri, Sept 4. In the first four days, student groups rotated between the four field exercises, while the last day was dedicated to the Lost Peg competition and a demo of the hydrographic surveying remotely controlled vessel (a.k.a. the HyDrone). The cadastral retracement and the RTK exercises were run in the West Campus Park, while the deformation and static GNSS & precise levelling exercises were located near the CCIT building on campus. Our students did a good job of staying two metres apart, wore face covering all week, and cleaned instruments and data collectors frequently.



Survey Camp 2020

We were impressed by students' cooperation, patience and enthusiasm. Overall, the COVID-19 version of survey camp was a success. Still we are all looking forward to conducting the field course back in Kananaskis in the future.

AUTHORS: Ivan Detchev and Kyle O'Keefe

August 25, 2020

Dr. Derek Lichti - appointed as the Canada National Chair of ISPRS

International Society for Photogrammetry and Remote Sensing (ISPRS)



The Canadian Remote Sensing Society's (CRSS-SCT) Executives have approved the nomination of Dr. Derek Lichti as a Chair of the ISPRS-CNC in their meeting on August 25th.

We wish Derek all the best in his new role!

July 17, 2020

Dr. Quazi Hassan appointed as Director of CEERE

Centre for Environmental Engineering Research and Education



Dr. Quazi Hassan has been appointed as Director of the Centre for Environmental Engineering Research and Education (CEERE) at the Schulich School of Engineering beginning on July 1st, 2020 for a 3-year-term.

Dr. Hassan leads the Earth Observation for Environment Laboratory, a joint Geomatics and CEERE research lab, which conducts cutting-edge research in addressing environmental issues by integrating remote sensing, GIS and modelling techniques.

We wish Quazi all the best in his new role!

Sept. 17, 2020

2020 TECTERRA Award Winners

Student Leadership: Erica Lemieux | Influencer of the Year: Dr. Naser El-Sheimy



Student Leadership in Geospatial: Erica Lemieux



Erica is a top ranking fourth-year undergraduate student in the Department of Geomatics Engineering at the University of Calgary, simultaneously specializing in a minor in Energy and the Environment Engineering. She is an engaged leader who actively works to promote science, engineering, and technology to female youth and to foster a nationwide geomatics engineering community.

Influencer of the Year: Naser El-Sheimy



Naser, Professor in the Department of Geomatics Engineering at the University of Calgary, has a long history of supporting the geospatial industry through entrepreneurship, building ecosystems internationally, and providing leadership through his role as an educator. He influences the industry every day with his passion for technology.

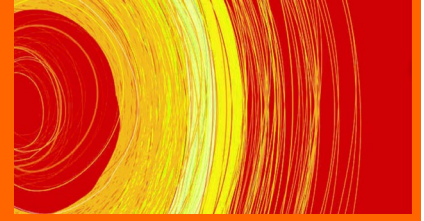
Click [here](#) for more details

TECTERRA is a Canadian geomatics technology innovation support centre. Established in June 2010 as a non-profit organization. Tecterra assists geomatics technology companies across Alberta to achieve commercial success. The TECTERRA Awards were developed to create a platform to celebrate the leaders and technological disruptions in geospatial.

Dec. 10, 2020

Geomatics Engineering Award Recipients

Schulich School of Engineering Excellence Awards



The Schulich School of Engineering Awards of Excellence were presented to the recipients in a Virtual Ceremony on December 4th, 2020. Here is the list of the Geomatics Engineering recipients:

Teaching Excellence Award:

- Michael Collins

Remote Teaching Awards:

- Alex Bruton
- Kyle O'Keefe and Ivan Detchev

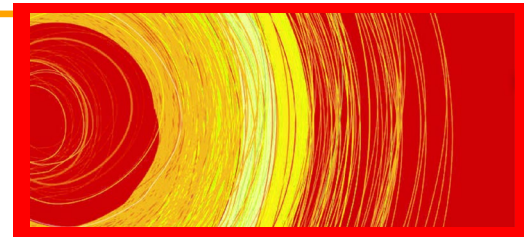
Graduate Teaching Assistants Awards:

- Lingyi Cui
- Rodrigo Augusto de Oliveira e Silva

Congratulations to all the recipients!

4+1 MEng Program in Geomatics Engineering

Accelerated MEng (4+1) program in Geomatics Engineering designed for senior undergraduate students in Engineering or Sciences.



The Accelerated MEng program in Geomatics Engineering is an opportunity for **senior undergraduate students in engineering or science** to complete an **MEng degree within one year or less** from the completion of their undergraduate degree. U of C students **entering the final year of their BSc program** can take up to **3 extra courses** to their BSc degree that can be transferred, after graduation, for **credit to the MEng program**.

Read more details in this document: https://schulich.ucalgary.ca/news/sites/default/files/2020-05/Geo%204%2B1%20MEng%20Program_0.pdf

Position yourself ahead of the crowd

Professional master's degree in geomatics engineering

Apply now

Access Canada's largest geomatics engineering program

“



The need for geomatics engineers is high. From consumer-grade technologies that use spatial location - like Roomba or Uber - to high-tech industries like precision agriculture, they're essential to everybody.

—
Stephanie Michaud, P.Eng.

Strategic Marketing Manager, Geospatial Field Solutions, Trimble Inc.

”



<https://schulich.ucalgary.ca/future-students/undergraduate/programs/transfer-program-bachelor-science-geomatics-engineering>

About the program

This new pathway allows students with **approved technical diplomas** to transfer up to 10 courses and offers a three-year program to complete a Bachelor of Science in Geomatics Engineering. Until now, polytechnic school graduates were able to transfer only a few courses and were required to study at least four additional years to earn their degree .

A fully accredited degree

The Bachelor of Science in Geomatics Engineering is accredited by both the Canadian Engineering Accreditation Board and the Canadian Board of Examiners for Professional Surveyors (CPEPS).

Graduates of this program can become an Engineering in Training in all provinces.

To satisfy CBEPS requirements, students must complete the Concentration in Cadastral Surveying, which qualifies them to article in all provinces except Ontario and Quebec.

Admission requirements

Apply to start in September

- Applications open Oct. 1 and close March 1

Admission is based on:

- Average of B+ or 3.30 GPA or better in at least the first three terms of your diploma
- Completion of the following five high school courses: English 30, Math 30, Math 31, Physics 30, Chem 30



“

The University of Calgary offered an easy and fair transfer option to...expand my knowledge in the geomatics field and to become a more valuable asset when I do graduate. The excitement for this area of study and material that started at SAIT, is only growing at UCalgary.

”

Matthew Travaglini

Third-year Geomatics Engineering student