THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY | VOLUME 36 FROSH ISSUE | MONDAY, SEPTEMBER 5, 2016

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War of the Worlds!

It's Time to Fight for the Supremacy of Your Team

ARYN CAIN AND JARED GOUR
SUPERHUGES

Hello, all you brand new engineering students, and welcome to the University of Waterloo. You are about to plunge into the most insane adventure of your lives as we explore the galaxy in this year's Engineering Orientation Week!

By now, you've hopefully found your way to our website (engorientation.uwaterloo.ca) and learned a little bit about Waterloo's Engineering Orientation traditions. We hope you're just as excited about the week as we are, and that you're prepared to have one of the greatest and most welcoming weeks of your life! By now you've probably received your Orientation Kit full of all sorts of goodies and been put onto a colour team. Be sure to take a look through your kit; it has some great swag that will give you a taste of what to expect this week, along with some very helpful information. Tuesday is when the fun really begins! Remember to wear your Orientation shirt as well as pants or shorts that you don't mind getting wet. You'll start the day by finding your colour group's headquarters (follow the string). Here, you'll be greeted by some of your leaders, the Bigs and Huges. Their job is to answer any of the questions you may have about Orientation Week or Engineering in general. It was not too long ago that they were in your shoes, so they know how you feel! You might get a little overwhelmed with the number of new faces you're meeting, but don't worry! You're all in the same position, so go and introduce yourself to someone, as there's a 7.692% chance that they're in your class—and some of them may well become your new best friends. Enough about that. Once you're in your headquarters, you might be a little scared, excited, or both! Now what, you ask? Tuesday is when you earn your Hardhat alongside your Bigs. You'll meet the Dean and the infamous Education Committee, and meet our Engineering mascot, the Tool. It's the ultimate and the all-knowing Tool (did we mention it also loves Engineering spirit and loud noises?). Your Hardhat is your protection against the foes of Engineering and is a well-established tradition that ties together all of the great Waterloo Engineers before you. You must do everything in your power to protect this hard hat and all that it represents. Once you have earned your Hardhat, you'll come together in a show of Engineering unity as you create a special design for the Aerial Photo.

On Wednesday, grab the multitool from your Orientation Kit and your freshly earned Hardhat, as you'll put them to good use at Junkyard Wars! You'll have the opportunity to prove your ENGinuity using only items found in a massive pile of salvaged junk to build contraptions to meet the challenges of the day.

Classes start on Thursday, but take a break and drop by the Student Teams Design Center in E5 4:00 pm to 6:00 pm to meet several student-run engineering design teams.

But wait, there's more! During night-time cross-campus events, you'll get to mix and mingle with students from other faculties. Make sure you come out to events like Warrior Wander on Wednesday or Thursday, Friday's Choose Your Own Adventure, and Monte Carlo on Saturday! Check your schedule to know all the details.

We, as your SuperHuges, are part of the Engineering Federation Orientation Committee (EngFOC) and are here to help make this week as fun as possible for you. This week was created especially for you, so the more you put into the week, the more you'll get out of it. If you have any questions or just want to say hello, don't be afraid to stop us at any time! We are wearing gold jacket/vest things all week! Enough talking from us now! Now it's time to explore the intricacies of The Engineering Worlds and prove to everyone that you are the ultimate, the infallible, and the true champions!

Aryn Cain and Jared Gour (your SuperHuges)

LISTEN UP, FROSH!

HEADCOM
EDCOM LEADERSHIP

The easy part was getting here, now you're going to have to prove that you have what it takes to be a Waterloo Engineer. You have a lot to learn, and not a lot of time to learn it, so pay attention, Frosh.

We are HEADCOM, and we are in charge. We control EdCom and Orientation Week. You have one job this week, frosh, one thing you need to remember—IMPRESS EdCom. We cannot stress enough how important this is.

EdCom is the Education Committee. We are your guides and superiors. We are a dedicated group of senior students who are the best and brightest that Waterloo Engineering has to offer. This means that we are the best and brightest, PERIOD.

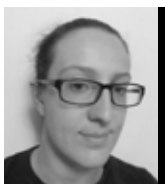
EdCom participates actively in the Engineering Society, WEEF, and many of the student teams you will hear about on Thursday. EdCom is everywhere, EdCom does everything, and EdCom is NOT easily impressed.

EdCOM will award you your yellow hardhat, if you earn it. This means that EdCOM decides if you are worthy of being a Plummer; a true Waterloo Engineering student. Once you have your hardhats, we will keep testing your ENGinuity during JunkYard Wars.

On Saturday at Closing Ceremonies, based on everything we have seen, we will decide who has won the week, and who did not make the cut.

Good luck, Frosh. You're going to need it.

Don't Panic!



CAITLIN MCLAREN
INCOMING
EDITOR-IN-CHIEF

Welcome to all first-years! Congratulations; you did it! You made it here! I hope you are all as proud of yourselves as I am of you. Look around campus: this is basically going to be your home for most of the next five years. You're going to work here, study here, eat here, and yes, sometimes you will sleep here. You might meet your best friend, start a career, or find the love of your life. Who knows?

I am super excited to be the editor of this paper for the upcoming term. It feels like only a week ago that I was a first-year, finding my way around campus for the first time and trying to juggle my classes, events, sleep, personal life… you name it. It might feel overwhelming at first, and there are sacrifices you will need to make, but it is totally doable (I promise!) and will get easier over time.

Many of you don't really know what to expect in university, or how to handle the changes in how classes, homework, and exams are run. Here are some practical study tips:

Your professors have office hours for a reason. Use them. Even if you understood everything in class and managed the homework just fine, ask your prof for a heads-up on what you will be doing next and how to prepare for it.

I'm going to be honest - some professors aren't very good at teaching. If you really can't understand anything, there are usually at least one or two others who teach the same course. Go to their office hours instead.

Engsoc runs a large exam bank (https://www.engsoc.uwaterloo.ca/exambank/). Use it. If it doesn't have exams for your course, try asking your professor for past exams. Those are probably the best way to see how much you know before midterms and finals, and make sure you go over as many as you can beforehand.

Don't sacrifice your sleep. Seriously, don't. If you build up a big sleep deficit, your work will slow down and the quality of work will go out the window. If it's getting too late and you can't keep your eyes open, nine times out of ten you should just push the stack of homework aside and get some shuteye.

You're getting really thrown off the deep end this year, with two days of classes in the first week. It might feel like a lot of work is getting thrown at you right away. That isn't going to change over the next five years, so take a deep breath, relax, and get down to things. Probably many of you found high school pretty easy, and you might be used to not taking school very seriously. Don't make that mistake! It can be easy to fall behind. Even though you are an adult now (I know, right?) and there is no one forcing you to go to class, do your homework, study at night instead of partying or watching movies, it's in your best interests to do all of those things.

On the other hand, if you are someone who focuses a lot on your academic life, lives for getting good grades, and spends a lot of your spare time studying, I feel you. We're all nerds here. Still, there are also times when you should lighten up. Don't take everything too seriously, at least not all the time. Make sure you manage to squeeze plenty of fun times in as well. Join a club or a student team. (Or join us here at the Iron Warrior!) You're not just here to learn how to be an engineer; you're also here to learn about life. Meet as many new people as possible, and talk to them and learn new ideas. Thankfully, Waterloo has an incredibly diverse body of students and you can learn something from everyone!

If I could go back to my first-year self and tell myself one thing, it would be: don't worry too much. Don't worry too much if you don't do well on some test or exam or course; just move onto the next keep going, and do your best in the future. Don't worry if something goes wrong with your plans; if you try hard enough, there will always be a way out. Don't worry about your future; just try to create the best future possible. And definitely, 100%, do not worry about whether you can make it here. You got yourself here, and you absolutely can get yourself to the end.

Great Expectations

BRYAN MAILLOUX
OUTGOING
EDITOR-IN-CHIEF

First of all, congratulations on getting accepted into Waterloo Engineering! Take a second to look back on your past achievements and feel proud of yourself, because you certainly deserve it. Getting into Waterloo Engineering is not an easy feat, and it's definitely cause to celebrate. It means that you have the smarts, the tenacity, and the commitment to survive the years ahead. So, without further ado, let's take a look at what you can expect from your first term here at UWaterloo.

Your journey here will begin with O-Week, which is hands-down the best week of the term. For some, this is a chance to make friends with others in their graduating year. For others, it's a way to meet upper year students who have been in your position before and who can offer sound advice on tough questions. (Pro tip: don't be scared to ask upper years for advice! They'll be happy to tell you their stories.) For still others, it can be where your most memorable moments of the term come from. Orientation Week can be tiring, but you only get one of them, so be sure to come out to all the events lined up for you! The next step on your path through 1A is what you came here for – getting educated! Some things you encounter during your first term should be familiar to you. Weekly assignments? Yeah, those still happen, at least in 1A. A course you're not interested in at all but that you still need to pass to get your degree? Yeah, everyone has one of those (Ask around – it's likely to be CHE 102 or PHYS 115). Great teachers, and not-so-great teachers? Uh-huh.

But university life has some novelties to offer as well. First off, I hope you're ready for midterm and final exams to be worth way more than you're used to. The pressure's on – but you're here, so I know you can deal with it! First-year is also a great opportunity to try a bunch of things you might not have had access to in high school. For instance, if you have an interest in a certain sport or hobby that you've never tried, there's probably a club for that here. You can find out more about all the clubs here at Waterloo by going to clubs day, which usually happens sometime during the first month of the term. I also highly recommend joining one of the student teams, where you can gain valuable skills (i.e. stuff you can put on your resume) while working on a cool project. I guess I'll leave off with a couple of pieces of advice I wish someone had told me during first-year. First off, finding a job is one of the hardest things you're going to have to do in your first term. Even if you've had a job before, use the resources available to you to make your job hunt easier – resume critiques and interview workshops are offered by the Engineering Society during the term and can give you that extra edge you need to get employed. Second (and this is more for when you're finishing first-year; it's not that far off!), most of the time in your first-year courses, you won't be told why you're learning the things you're learning, and so you might be tempted to forget them after first-year. DON'T. Pretty much every single thing you learn in first-year will be used later on in a different course. If you're lucky, you'll have a professor who reviews the material with you at the beginning of the course.

Anyway, I hope you are ready to start a new chapter in the beginning of your lives! Whether you're feeling excited, anxious, or already feeling homesick, remember that by joining the Waterloo Engineering family, you are sure to be destined for great things.

Well then, let's get started, shall we?

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We are the official newpaper of the University of Waterloo Engineering Society representing the entire undergraduate engineering student body of over 6000 students.

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The Iron Warrior is a forum for thought-provoking and informative articles published by the Engineering Society. Views expressed in *The Iron Warrior* are those of the authors and do not necessarily reflect the opinions of the Engineering Society.

The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included.

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Class of 2021, Welcome to Waterloo Engineering!

PEARL SULLIVAN
DEAN, FACULTY OF ENGINEERING

I am very pleased that you have chosen the University of Waterloo to pursue your postsecondary education. Once again, we have attracted an impressive cohort of the brightest students to our first-year engineering programs, and you should take pride in joining our Faculty. You will be in the company of top researchers and teachers, dedicated staff, and motivated undergraduate and graduate students.

The Faculty values the importance of a vibrant, engaged student body, and the contributions our students make to Waterloo Engineering, the university, and the community.

The success of our students—academically, on co-op work terms, and in extracurricular pursuits—is a major contributor to our excellent reputation, and so we look for students who are well-rounded and passionate. The result is an involved student body, home to active student societies, competitive student teams, service-minded organizations, as well as newspapers, clubs, and bands. I encourage you to get involved in one or more groups or activities that inspire you and will enrich your Waterloo Engineering experience. Over the course of Orientation Week, you will be introduced to many new faces, a lot of new information, and a diverse offering of new opportunities.

During this week and throughout the year, you may feel overwhelmed at times, adjusting to new expectations for academic and workplace performance, learning the ropes of our co-op program and choosing among the abundance of extracurricular activities.

Always remember that there is a strong support system available to you. The First-Year Engineering Office is an invaluable service, here to help with your transition by offering academic and personal counselling, as well as tutor sessions and upper-year mentors. Your professors and teaching assistants are also excellent resources, and upper-year students can provide important insight. Take the opportunity this week to connect with your orientation leaders. After all, they were in your position not that long ago!

In the next few years, you will be presented with different career possibilities. Whether you aspire to work for a specific industry, get involved in innovative research, start up your own company, or all three, there will be opportunities to pursue your aspirations within your undergraduate program. Get involved and learn as much as you can. Once again, class of 2021, welcome to our Faculty and enjoy your Orientation Week!

Sincerely,
Pearl Sullivan
Dean, Faculty of Engineering

Welcome New Archies!

JASDEEP MULTANI AND MARIAH PALANTZAS
ARCHFOC

This week we present to you your first mission – to experience the incredible world of Architecture and Engineering! During Orientation Week, you'll meet students in your program and faculty, explore both the Cambridge and Waterloo campuses, release creative energy, earn your first hard hat, and receive your drafting kit. We're taking a three-pronged approach to Orientation — the City of Cambridge, University life in general, and Waterloo Architecture in particular. If you're reading this, you've probably received your Orientation kit. Dig through it and take a look at all your new stuff! It's just a sneak peak of what's going on this week and for the rest of the year.

We're kicking off on Sunday at the school with registration and introductions. You're going to meet your future classmates! Soon after, you'll meet your leaders, the Bigs and Huges, who will be with you throughout Orientation Week and the fall term. Most of your leaders are second-year students who were in your shoes last year, and are there to answer any and all questions you may have about university life. Later on, we'll play games in Dickson Park and race cardboard superhero mobiles around the school.

Monday will be focused on acquainting you with Waterloo Architecture and its surrounding neighborhood. In the morning, you will embark on an incredible adventure know as the Instagram Challenge! In the evening, it's time to relive Art Attack with a flurry of glue and paint at Art Night. There may even be a little dance party!

On Tuesday, we're making our way up to Waterloo to join the rest of the Faculty of Engineering. To spot Engineering amongst other faculties' Orientations, look past the brightly colored t-shirts and look for purple-dyed skin. We're going to take part in the Engineering tradition of earning our hardhats. You will get your yellow hardhats, and watch your leaders earn their green and red ones.

On Wednesday morning, we'll jump right back into Waterloo Engineering. Here you'll have the opportunity to show off your design skills at Junkyard Wars, where you'll help build a series of contraptions to impress EDCOM. Back in Cambridge on Wednesday afternoon, you will get your school keys, set up studio and meet the incredible facility who will impact your undergraduate year and teach you what you will need to know to help you succeed in more than just architecture. Afterwards, we will wrap up the evening with stargazing outside. Getting your drafting kit is going to feel like the holidays!

Thursday will be your first day of the school year, so we will let you focus on the most popular class that is studio.

Friday is also a school day, but don't worry: we know how to make it fun! In the evening we will be traveling to main campus to take part in Choose your own Adventure – an opportunity for you take part in various exciting adventures and activities that will sure to make you feel right at home on main campus.

Saturday will wrap up the week with the Black & Gold Pride Games, our Final Feast, and our semi-formal Monte Carlo to top it all off (don't forget to bring your dresses and to polish those shoes!).

As the Architecture Federation Orientation Committee (ArchFOC), we're here to help make this week as worthwhile as possible. Getting adjusted to life in Cambridge is both exciting and challenging. As you and your classmates begin shuttling around this week, we hope to acclimatize you as best — and as quickly — as possible. If you have any questions, feel free to stop us or any yellow jackets. We hope you're geared up for the adventure that is Orientation Week! Follow us though the week on Facebook at Waterloo Orientation – Architecture, Instagram @ archorientation and #archUWOW16.

What is the Engineering Society?

ADELLE VICKERY AND RACHEL MALEVICH
ENGSOC PRESIDENTS

The Waterloo Engineering Society (commonly referred to as EngSoc) is the official representative body for all engineering undergraduate students at the University of Waterloo. It exists to support you academically, socially, and professionally during your time here at Waterloo. EngSoc serves its members in three main ways: representation, services, and events. You can find an overview of these points in this issue of the Iron Warrior or at engsoc.uwaterloo.ca.

EngSoc is led by an Executive team who work on your behalf with the Faculty of Engineering, the student union, external engineering groups and many more organizations. It is up to the Executive to make sure that your voice is heard and that you are getting the most out of your five years here. The EngSoc Executive consists of the President, VP Academic, VP Student Life, VP Communications, and VP Operations and Finance. They are all introduced in this paper but as a whole the Executive are responsible for ensuring the Society runs effectively and efficiently to better serve you, the students.

More important than the President and the other Executive is the Council. The Engineering Society Council is the group that makes all of the decisions for the Society whether than be a stance on how the engineering students feel about a given topic or how to spend the $60,000 budget each term.

Council is made up of two representatives from each on-stream class, together sharing one vote. Their job is to attend all of the council meetings (usually every other Wednesday) and voting on their class' behalf, and to bring forward any concerns their class has about their University experience. They report back to their class about what is happening within the Society, including the upcoming events and services, as well as any of the important issues that are being brought forward. You don't have to be a class rep to attend Council meetings; they are open to everyone and we encourage anyone interested to come out! Attending meetings is the easiest way to get involved in the Society and to stay informed on what is happening in the Society, Faculty, and University. Interested in being a class rep? The EngSoc Executive will be coming around during the first two weeks of class to run elections. Being a class rep is a great way to get involved and gain experience within the Society!

The Society is always looking for new initiative and improvements. So we encourage you to get involved or to just let us know what you would like to see! Drop by the EngSoc Office any time and pitch an idea, or just say hi!

Welcome From the Presidents

ADELLE VICKERY AND RACHEL MALEVICH
ENGSOC PRESIDENTS

Hi Class of 2021! We are your Engineering Society Presidents: Adelle Vickery (A-Society) and Rachel Malevich (B-Society). We are both very excited that you are here and we can't wait to meet you!

As Presidents, we are the face and voice of the Engineering Society and our main role is to represent you, the students. We advocate on your behalf to the faculty, the university, the student union, and to other groups that affect your undergraduate experience. To do this effectively, we need your input! During the term, feel free to stop us with any questions or concerns you have about school, university issues, or the Society itself. You can usually find us in the EngSoc office (CPH 1327) or our student lounge, POETS (CPH 1337). You can also reach both of us at president@engsoc.uwaterloo.ca.

We can also be found at all of the different events the Engineering Society runs each term. The first event is coming up quickly on Sunday, September 11th. It's EngSoc Day! Each year we run a Charity Head Shave, dunk tank, and charity BBQ starting at 11:00 am outside Carl Pollock Hall (CPH), followed by our termly Scavenger Hunt (aka SCUNT) at 5:00pm in CPH Courtyard! We cannot wait for this year's EngSoc Day, and are looking forward to meeting all of you! The rest of our events can be found on the EngSoc website, engsoc.uwaterloo.ca/events, so make sure to check it out! There are a variety of events that run each term, and they're a great way to make friends, have fun, and get involved in university!

EngSoc is a wonderful community to be a part of, and we hope that you are all as excited to get involved as we were in first year. We have opportunities for everyone, and if there is something that you notice that we aren't doing, let us know! We are always looking for new ways to make EngSoc better for everybody.

If you want to know more about the Society and don't want to wait until classes start, we will both be around for Orientation Week wearing white hardhats and would be happy to answer any questions you have!

We look forward to working with you, and we want to wish you the best of luck for your time here at Waterloo. Have an amazing Orientation Week, and see you on Tuesday!

Managing EngSoc's Services and Finances

Meet Your VPs Operations and Finance

ABDULLAH BARAKAT AND KATIE ARNOLD
VPS OPERATIONS AND FINANCE

Welcome to Waterloo Engineering! We are the Vice-Presidents Operations & Finance of the Waterloo Engineering Society, Abdullah Barakat and Katie Arnold! Abdullah, A-Soc's VPF, will be serving you this fall, and Katie, his B-Soc counterpart, will take office in the Winter. We are in charge of managing the Engineering Society's funds in ways that can help improve your experience as an engineering undergraduate student at Waterloo!

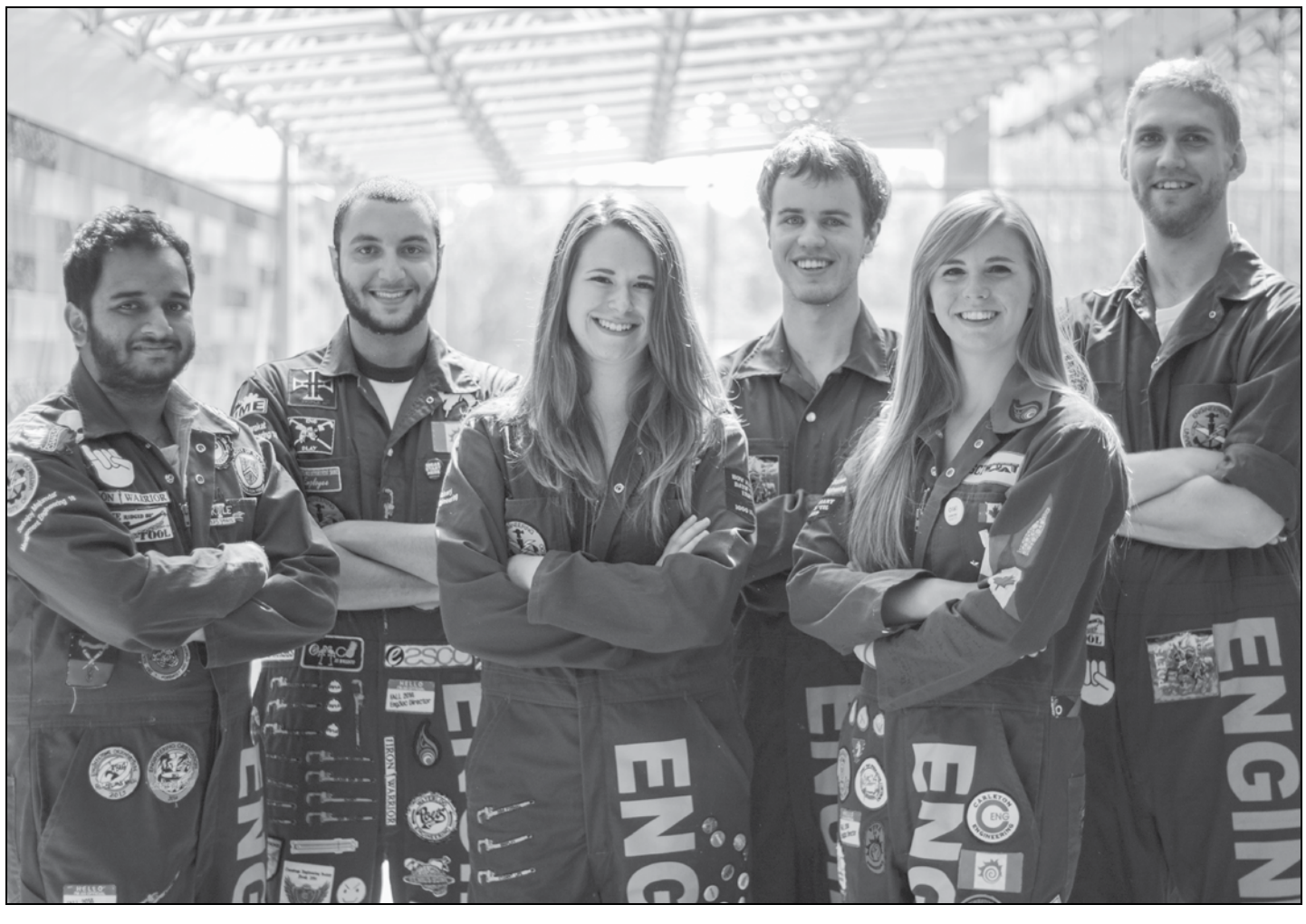
One of our main responsibilities is the creation of the termly EngSoc budget. This budget (funded by the $15.90 EngSoc fee that you pay every term) is where we get all the money for the great events, services, and programs that EngSoc has to offer. Once the budget is approved by the EngSoc Council, our Directors are all clear to roll out the awesome events! Another large part of our portfolio is managing the major service operations that EngSoc runs: Novelties, RidgidWare, and POETS. Information on these services are explained in this issue of the Iron Warrior. We are in charge of handling the day-to-day operations of these services, maintaining the inventory within Novelties and RidgidWare, and managing our student lounge such that everyone feels welcome and included.

The VPOF is also responsible for the sponsorship initiatives run by the Engineering Society. Each term, a certain percentage of the budget is allocated towards sponsorship, to which any student group can apply for funding. It is exciting to see the innovative student body working on a number of incredible projects. A committee of students, overseen by the VPOF, then decides how the money will be allocated in order to best benefit the engineering students at Waterloo.

We also chair the Engineering Capital Improvements Fund (ECIF) Committee each term, which is a fund used to make purchases to improve engineering student life at Waterloo. Items such as new furniture for POETS, or upgrading supplies in the Engineering Society Office have been purchased through this fund. The fund is always taking applications, so if you have something that you think we should purchase, let us know!

Last but not least, we are in charge of the Student Deals program. If you've paid your EngSoc fee for the term, you can go to the Engineering Society Office in CPH and get the EngSoc Student Deals sticker on your WatCard! With this sticker, you can go to various community establishments get exclusive deals! We currently have arrangements with about eight different stores and are always looking to expand the program.

We are very excited to have you as part of our engineering community. Thank you for taking the time to read our article, and we hope that you enjoy everything that EngSoc has to offer. Feel free to check out our website, engsoc.uwaterloo.ca, to see what's going on. We wish you a great Orientation Week and hope you say hi on campus!



A-Society, from left to right: Sarbajoy Majumdar (VP Internal), Abdullah Barakat (VP Finance), Adelle Vickery (President), Jeff Gulbronson (VP Education), Ola Suchon and William Wilmot (VPs External)

We Help You Survive School

A Warm Welcome from Your VPs Academic

JEFF GULBRONSON AND ANDREW MCBURNEY
VPS ACADEMIC

Hey there, Class of 2021! We're Jeff Gulbronson and Andrew McBurney, and we are your Vice-Presidents Academic. Jeff will be on term in the Fall (A-Society), and Andrew on term in the Winter (B-Society).

The main part of our job is to ensure you have the necessary resources and environment to succeed academically in school, and on co-op. Between the two of us, we're responsible for representing and advocating for all undergraduate engineering students at various faculty, university-wide and co-op related councils.

There are plenty of ways for you to get involved with regards to academic advocacy in your first year. Within your first two weeks on campus, your class will elect academic reps for the term. Their job is to periodically meet with your profs, and voice any concerns your class may have. This is an excellent chance to get involved right away, with no experience required! We'll have a first-year academic rep meeting where we'll discuss issues that affect all programs, and provide advice on being a great class rep for your cohort.

In addition to advocating on behalf of students, we help to provide academic resources for your benefit. The Society offers a variety of services to help you succeed, such as our online exam bank. We have old midterms and final exams for almost all of your core courses, many with solutions, so it's a great place to find study material. We also help run course critiques each term, where you get a chance to provide feedback on both your courses and professors.

You don't have to wait until the end of the term though! It's our job to gather student feedback throughout the term, so you'll receive various surveys from us asking for your opinion on things like co-op, workload and scheduling.

You can also reach us at vpacademic.a@engsoc.uwaterloo.ca (Jeff), and vpacademic.b@engsoc.uwaterloo.ca (Andrew) or in the EngSoc Office (CPH 1327), if you have any questions, concerns, or just want to chat about how first-year's going. Good luck, and we're both looking forward to seeing you on campus!

Keeping Waterloo Connected with Other Schools

Hello from the VP External and VP Communications

WILL WILMOT, MELISSA BUCKLEY, DAN ROBERTSON
VP EXTERNAL / VP COMMUNICATIONS

Hey there! We are Will Wilmot (A-Society VP External), Melissa Buckley and Dan Robertson (B-Society VP Communications). We are responsible for the external marketing/branding of the Society to any external organizations.

A large focus that we have is taking care of any logistical responsibilities for attending conferences, which include delegate selection, travel plans, and reporting on the conference to the faculty and the Dean. We also attending meetings of external bodies related to engineering students and Professional Engineers; this includes Professional Engineers Ontario (PEO), the Engineering Student Societies' Council of Ontario (ESSCO), and the Canadian Federation of Engineering Students (CFES).

There are numerous opportunities for everyone to participate in conferences with engineering students from around the country, and to share your experiences. This is a great way to learn about how other schools' Engineering Societies function and bring new information back to our school. If you would like more information about what happens at conferences, what you stand to gain from them or anything conference related in general, feel free to find Will in the Orifice during the Fall term, Melissa in the Winter, or send an email to vpexternal@engsoc.uwaterloo.ca.

We are looking forward to meeting you all, and we hope you have an amazing time here at Waterloo! Don't be afraid to reach out to us, or to try something new. Best of luck in first year!

Reaching Out To You With Fun Events

A Message From the VP Internal and the VP Student Life

SARBAJOY MAJUMDAR, CHELSEA VANDERMEER, SABRINA HUSTON
VP INTERNAL / VP STUDENT LIFE

Hello and welcome to Waterloo, the best place… for SO MANY reasons!

We are Sarbajoy Majumdar, Chelsea VanderMeer, and Sabrina Huston, your VP Internal and Vice Presidents of Student Life for Fall 2016, Winter 2017, and Fall 2017 (respectively). We are here to plan coffeehouses, board game nights, LAN parties, D&D, hackathons, bowling, art nights, laser tagging, improv games, movie nights, semi-formals/dances, puppy petting, volunteer/outreach opportunities, and overall, we are here to spice up your term! It is super important to relax and have fun when you can during school, because it will make you happier and actually improve your academics. Yes, this is scientifically proven; trust us, we know.

Coming to Engsoc events is easy. Stay updated by following EngSoc on Facebook, keeping an eye on the posters on the walls, and checking the events calendar outside the Orifice in CPH. Right now, some keynote events we want you to know about are:

First Year Mentoring is a way for you to be paired with a wise upper-year who can give you all the secret tips of how to thrive in Waterloo engineering! Sign up online at bit.ly/FirstYearFYM

"Lunch and Learn" University Life seminars will run near the beginning of the terms to help teach you how to survive best with this new university lifestyle; these sessions encompass study tips, how to do laundry, bussing, grocery shopping, de-stressing, where the best Pokestops are, and any other questions you may have.

Engplay is a play which occurs every term, run by and put on by students just like you! Come audition to have a crazy good time and bond with other future stars, or come see it and get ready to be dazzled.

Semi-formal occurs midway through the semester and gives you a chance to show off your fancy side and killer dance moves. (As long as you pretend you're good, everyone will believe it.)

Coffeehouses and TalEng happen every term, and are a really fun way to showcase your cool and strange talents, and/or appreciate the secret abilities of your classmates! Also, there is usually lots of free food.

NEM (National Engineering Month) is in March, and through fun community events such as building creative structures out of cans and creating a Rube Goldberg machine, we show everyone how great engineering is! Be sure to get involved to inspire more fantastic future engineers like yourself.

And back to Will from earlier --- are you interested in Outreach? Think community and charities! There are plenty of opportunities to work with the executive and commissioners to make a difference. As engineers, we love being engaged with our community; for this reason, every year the student body votes on a charity that the Engineering Society supports for a full calendar year. We run plenty of charity events that you can volunteer at or just participate in. Be sure to keep an eye out for things such as Charity Grilled Cheese and/or Pancakes, Movember and more! Stay tuned to find out what cause we will be supporting, we would love to have your help!

Another major component of the outreach we look at is connecting with students regarding the exciting and challenging field of engineering. The main initiative each term has us working with younger students in collaboration with Engineering Outreach. One event that we hope to run twice in the Fall term is Education outreach at the MUSEUM. Heading to Kitchener, we aim to run experiments that teach younger students about aspects of engineering.

This Fall we are starting a new initiative sending a group of engineers to the CN Tower for the CN Tower Climb on October 22nd. The goal is to promote engineering as a fulfilling discipline, which we do through a variety of outlets. Look out for volunteer forms in the coming months if you would be interested in helping out!!

We have all types of events and definitely have something for you…but if not, email vpinternal@engsoc.uwaterloo.ca and tell us what you want to see! Thanks guys!

B-Society, from left to right: Andrew McBurney (VP Academic), Melissa Buckley (VP Communcations), Sabrina Huston (VP Student Life). Rachel Malevich (President), Dan Robertson (VP Communcations), Chelsea VanderMeer (VP Student Life), Katie Arnold (VP Operations and Finance)

WEEF Is Good

ERIC SHI AND JORDAN NICKEL
WEEF DIRECTORS

Welcome to all new engineering undergrads, and congratulations on your achievements so far. Over the next few years, you will have the opportunity to contribute to all the reasons that made you choose this school, and the Waterloo Engineering Endowment Foundation (WEEF) is one of the best ways to get started.

WEEF was founded by two Waterloo Engineering students, Avi Belinsky and John Vellinga, in 1990 with the goal "to continuously improve the educational environment for undergraduate engineering students, and maintain our outstanding reputation." Through donations from the student body, employer matching contributions, and alumni, WEEF has accrued over 13 million dollars in principal. This fund is professionally managed and the interest earned is distributed each term to a series of proposals that are evaluated by a student only council. It is this council for which you will be recruiting two representatives from each of your classes. The representatives will be voted on by the class and will attend proposal presentations and decision meeting to allocate the funding available.

The presentations will be given by faculty members, student teams, and clubs. As a representative, you will have the chance to see what each faculty is doing with their facilities, what student teams are working on, and what different clubs in the engineering faculty are up to. Faculty (i.e. possibly your professor), staff, and upper year students will be presenting to you. With each class represented, all departments vote on the funding allocation and help guide the University's funding decisions. Yes, the Engineering departments do take into consideration what students are funding when allocating their own budgets. This is how WEEF gives a strong voice to the students.

Over its 25 years, WEEF has funded many of your lab facilities and supported student teams in their accomplishments. If you see a yellow WEEF sticker on anything in the school, that was funded by a student only council. Take a look around your labs sometime; there are lots of these stickers. And if you're planning on joining a student team, you should know that WEEF contributed one million dollars to the construction of E5 and its Student Design Center.

So if you enjoy being more involved and better informed about your school, be sure to put your candidacy forward when we visit your class in the next couple of weeks or contact us at *weef@uwaterloo.ca.*

Good luck on your academic and professional careers.

Waterloo Engineering Competition

WILL WILMOT
A-SOC VP EXTERNAL

The Waterloo Engineering Competition (aka WEC) is a competition, held each Fall and Spring term. Scheduled over a two day window, four different challenges are available to students. The junior design competition, open to first and second year students, gives teams four hours to work on and complete a previously undisclosed problem. Similarly, the Senior Design Competition gives a larger time frame of six hours for teams of third and fourth year students to complete their design problem.

Programming, the newest competition requires teams to construct industry-quality software that provides a solution to a given problem and demonstrate its functionality and quality to a panel of judges. Finally, in the Consulting Competition, teams are given six hours to produce a practical solution to a previously undisclosed problem that demonstrates social, environmental, technological, and economical resourcefulness.

Each task will be given with constraints that challenge each group to create a prototype and present to a panel of judges in an effort to win a berth to the Ontario Engineering Competition (OEC), to be hosted by Carleton University in Ottawa, early in 2017. In addition to advancing the OEC, there will be cash prizes and more!

This competition is run in conjunction with the Sanford Fleming Foundation which runs a debate competition as well as an innovate design competition. These winners also move on in their respective competitions to OEC to represent Waterloo at the provincial level.

Engineering Student Societies' Council of Ontario

JOCELYN LEE
ESSCO VICE PRESIDENT
COMMUNICATIONS

Hi first year students! Congratulations on starting your engineering education at the University of Waterloo – one of the 14 universities across Ontario that are a part of The Engineering Student Societies' Council of Ontario (also known as ESSCO). My name is Jocelyn Lee and this year I am Vice President Communications of ESSCO. I am currently in my second year of Civil Engineering and Society at McMaster University and am very excited to be working with ESSCO and all of you!

ESSCO is an association that represents engineering societies from 14 universities across Ontario, and acts as the link between engineering students and professional associations, academia, and government. Since its creation in 1987, ESSCO's goal has been to promote "unity, continuity, and visibility among Ontario engineering students".

In addition to representing students on a provincial level, ESSCO also hosts four conferences annually: Presidents Meeting (PM), Professional Engineers Ontario Student Conference (PEO-SC), First Year Integration Conference (FYIC), and Annual General Meeting (AGM). Each conference is an opportunity for students to meet at one ESSCO's member schools, and allows students to share best practices, discuss strengths and weaknesses of their schools, and implement positive change. Students who attend the conferences (known as delegations) are represented by executive members of their school's engineering society. One of the conferences, FYIC, is catered especially to first year students, and I would highly recommend applying to attend. This year, FYIC is hosted by the University of Ottawa in the beginning of February.

ESSCO organizes many different events that bring universities across Ontario together. These events include conferences, the Ontario Engineering Competition, National Engineering Month, and Wonderland Math and Physics Day. It is a great way to get involved and represent your university at higher level. As a student that is still fairly new to university, ESSCO has shown me that even though I am not a professional engineer yet, I still have the power to implement change and make a difference when it comes to my engineering experience. There are so many different opportunities that you can take part in, either as a delegate in a conference or a director with ESSCO. If you are looking to find out more about ESSCO and how it can help you, you can email your VP externals, any of the ESSCO executives, visit our website (*www.essco.ca*) or read our blog for weekly updates (*www.essco.ca/news/*). Good luck on your first year!

KITCHENER WATERLOO
TRAVEL Clinic
Travel Vaccines & Advice by Appointment
Health Canada Certified for Yellow Fever
519.570.4208
www.kwtravelclinic.ca
Physicians Certified in Travel Medicine

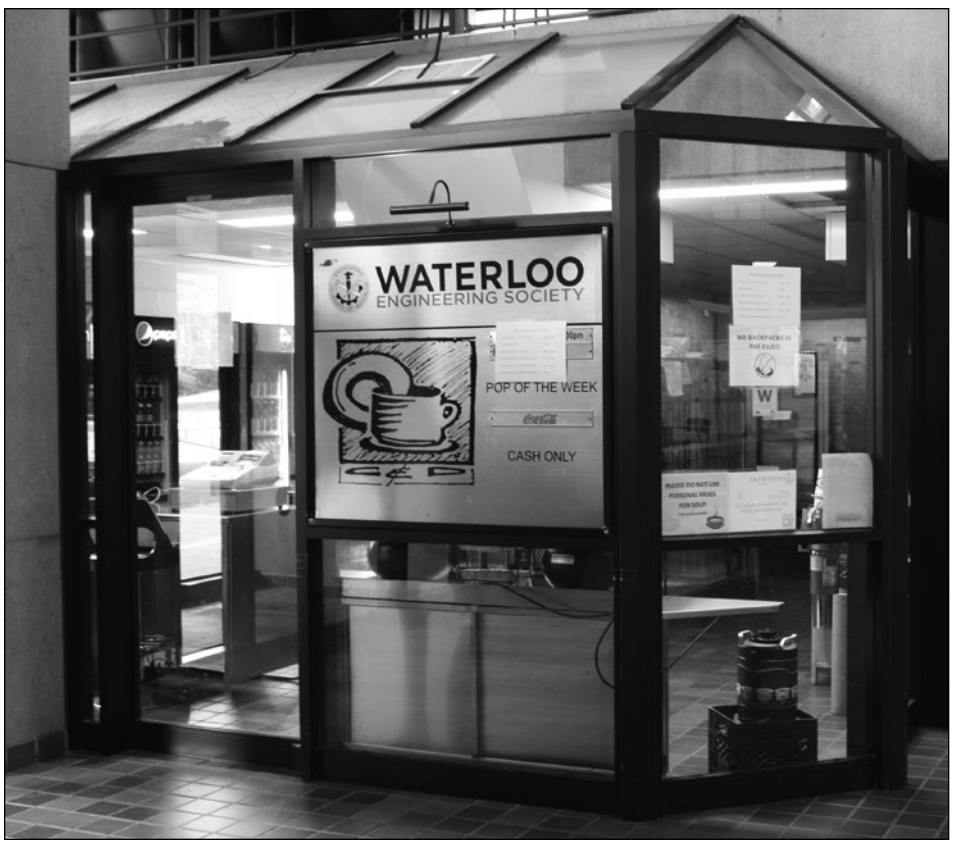
Engineering Society Services

ADELLE VICKERY AND RACHEL MALEVICH
PRESIDENTS

The Engineering Society is proud to offer an amazing number of services. Here is a brief summary of what we can offer you so you know how to get around engineering and fully utilize everything that is available.

C&D (Coffee and Donut)

EngSoc runs a coffee and donut shop with the lowest prices on campus. Head over to the Carl Pollock Hall (CPH) Foyer for low cost coffee and treats! Each of you should have received a promotional voucher in your Orientation Week bag. Please note that it does not accept Watcard, but it does accept debit and credit!



The C&D now accepts debit and credit! It's the best place to satisfy your coffee needs.

EngSoc Office (a.k.a The Orifice)

The Engineering Society office, also located in CPH, is a great place to get cheap printing, report binding, photocopying, and even business cards! Trust us when we say that cheap report binding will be a great thing for all of you in the near future. You can also sign out board games and pick up your student deals sticker! Please make sure to come by the Orifice to see everything we have to offer and to meet the lovely EngSoc Executive. You can usually find at least one of us working there!

POETS

In our student lounge, POETS, everyone is welcome! It is a great place to hang out between classes, play a game of pool, or even take a nap. It is open every day from 8:30-5:30 and for special events. There is a pool table, foosball table, and movies playing around the clock. Look out for our special "First Year Fridays" throughout the term!

The Novelties gift shop is located right next to POETS, the undergraduate student lounge.

Novelties and RidgidWare

Engineering Novelties is your one stop shop for all Waterloo Engineering swag. Located between the C&D and POETS, it is open from 11:30am to 1:30pm Monday to Friday. We have a variety of items including sweaters, keychains, glassware, and much more! Come out and show off your Engineering pride!

RidgidWare is our hardware and electronics store/service, and is a handy source for materials for both hobbies and projects! We have supplies such as LEDs, breadboards, Arduinos, and more! It is also a place where people can go for information and advice on hardware related matters for any projects they're working on.

Student Deals/Discounts

The Society offers a student deals program with discounts from local restaurants. Come by the Orifice to pick up your free student deals sticker. All you have to do is show your sticker at participating restaurants to get the discount. It really is as good as it sounds!

Exam Bank

Midterms can be a stressful time, but we want to help with the stress by having an online exam bank where you can search hundreds of past exams to help you study. The exam bank will give you a great sense of what your first year exams will look like. It can be found on our website, engsoc.uwaterloo.ca/exambank.

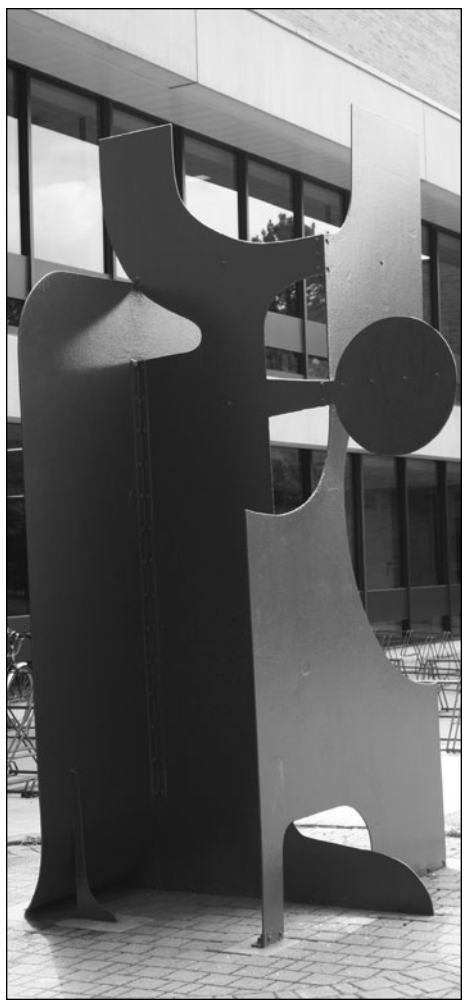
Resume Critiques/Interview Skills

Each term, there are thousands of students at Waterloo looking for co-op jobs. Finding that first job can be scary, but don't worry! EngSoc has lots of great resources to help you succeed.

EngSoc runs numerous resume critiquing sessions where you can get one-on-one time with an upper year student to go through your resume and ensure it is tailored to the type of engineering career you want. We also hold interview skills workshops where you can practice answering some engineering specific questions.

Mental Health Services

Mental health is an issue that is growing among engineering students, but EngSoc has made it a priority to help you stay healthy. We run various events throughout the term to help you cope with stress. We host a bi-weekly Let's Talk Mental Health session where you will get the space to talk about Mental Health with other students. We also run a mental health awareness week to help you learn about resources available on campus.



This sculpture, found outside CPH foyer, mysteriously changes colour throughout the year.

First Year Services

MARIKO SHIMODA
FIRST YEAR COMMISSIONER

Hey! Welcome to the Waterloo Engineering family! My name is Mariko Shimoda and I will be your First Year Commissioner with the Engineering Society this fall. My directors and I are very excited to meet all of you, and bring you some great events! We have been working hard on a few things to help you adjust to university and learn more about all the neat things in our faculty.

We are very excited to offer a First Year Mentoring Program that will connect first year students with upper years in the their program. Throughout the term there will be multiple social events for you to meet and get to know your mentor and other first-years. Mentors are there to answer any and all questions you may have, and to guide you along during your first year.

The First Year Engineering Leadership Conference (FYELC) is a two-day conference that will be held at the University of Waterloo on September 30th and Oct 1st. This conference is for anyone who wants to further develop leadership skills in their academics, extra-curriculars, and professional life. Delegates will meet other first-years while attending talks and sessions by notable leaders in the Waterloo community.

The numerous events run by the Engineering Society would not be possible without wonderful directors! Directors plan and run events such as Coffeehouses, EngPlay (engineering play), snowboarding trips, and so many more! Our First Year Directorship Mentoring program matches incoming students with our existing fall directors so first year students can learn what it's like to be an Engineering Society director. If you're interested in taking on a leadership role like this, stay tuned!

Find out more about all these events under the First Year tab on the Engineering Society website (engsoc.uwaterloo.ca/events/first-year), where you can also sign up for our mailing list. It's a great way to stay in the loop with the Engineering Society.

Going to university is a pretty big step in anyone's life and I hope to provide with you with the tools and guidance you need to succeed and adjust to your new home. If you have questions or comments about anything at all, send me an email at *firstyear@engsoc.uwaterloo.ca*, or approach me on campus! And again, welcome to the Waterloo Engineering family, and I wish you the best of luck with your first year!

Meet Your Colour Groups!

LIGHT RED - Marvel

CAILEEN, DANIEL, KRISTOPHER, MONICA, SARBAJOY
LIGHT RED HUGES

The world is at war, and we are in desperate need of its heroes. You have been chosen to join the ranks of Earth's mightiest heroes, the Light Red Avengers. Join us on our perilous journey as we fight to protect our world from unknown enemies. We will be facing dangerous missions, scavenging for lost treasures and earning our battle armor through grueling challenges. As you venture into unknown territory, bonds will be formed, battles will be waged, and from the ashes we will emerge victorious!

You will not be alone, as you will be joining forces with your fellow heroes and leaders, who will be guiding you through this war every step of the way. If you choose to accept this mission, remember to grab your hammers, shields, arrows and tools, and be prepared to smash through every obstacle with creativity, dexterity and integrity.

DARK RED - Star Wars

ALEX, CHRISTIAN, CLAIRE, ELAINE, RACHAEL
DARK RED HUGES

A long time ago, in a galaxy far, far away, the University of Waterloo said "Let there be only ONE superior engineering orientation group, and let that group be DARK RED" (cue Chewbacca noises). In case you haven't guessed yet, the Dark Red theme is STAR WARS!!!! Pull out your light sabers and get ready to battle the other groups in a series of awesome games, competition, and events in the WAR OF THE WORLDS. This week is going to be a blast, and all the hard work going into it is so that all of you can become acquainted with each other and the University. First Years, WE ARE YOUR LEADERS.

LIGHT ORANGE - Transformers

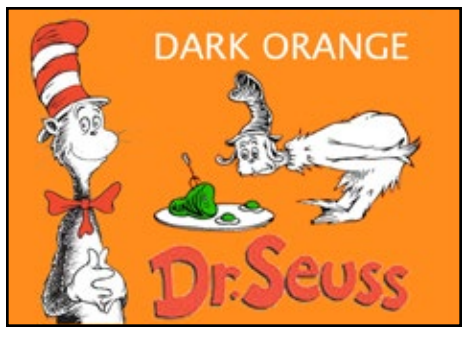
DRAKE, ELIZABETH, JEFF, MARA, VIVIAN
LIGHT ORANGE HUGES

The mystical bond between man and machine is more than meets the eye. Autobots, a heroic Cybertronian race disguised as everyday machines, have protected the human race from the evil Decepticons for many years. But now comes a war far greater than the ancient struggle between two classes of robots. Enemies of all kinds, from different worlds, have flooded the earth, threatening our home. The University of Waterloo has selected you, the engineers, beings who truly understand machines, to collaborate with these robots in disguise to defeat the masses of foes and save our planet from further danger. With your wits, courage, and strength, you will fight against strong enemies, create tight bonds with your peers, and learn the true values of an engineer. Brace yourselves to work hard and play hard. AUTOBOTS ASSEMBLE!!

DARK ORANGE - Dr. Seuss

CHELSEA, DAVID, KIERAN, RHIANNON, TIM
DARK ORANGE HUGES

Congratulations! Today is your day. You're off to Great Places! You're off and away! From there to here, from here to there, funny things are everywhere. Come join us in Waterlooville where all of us Dorange live! But beware of the Grinch, for he does not forgive! Oh the places we'll go! There is fun to be done! There are points to be scored. There are games to be won. And the magical things we can do with that ball will make us the winning-est winner of all.



LIGHT YELLOW - Lego

ALAN, ALEX, LIZ, JEAN-OLIVIER, STYLIANOS
LIGHT YELLOW HUGES

Light yellow, LEGO, more stuff. Your imagination is the only limit! As engineers, you can create whole worlds out of little plastic bricks. You can create structures in the colours of all groups, but the little yellow people reign supreme. No one will dare to step on us!

DARK YELLOW - Toy Story

BRYN, KELLY, MATTHEW, PATRICK, WOOK
DARK YELLOW HUGES

There's a snake in my boot …

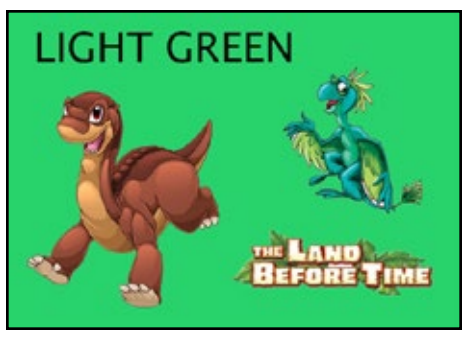
Are you ready to join us as Dark Yellow, also known as Dellow, representing Toy Story for orientation week?? We'll have Woody, Buzz, Bullseye, and the gang to show our spirit for this Disney classic. Orientation week is a time where you make friends, learn new things, and even if you don't make friends, in the wise words of Randy Newman "you've got a friend in (us)", but let's be honest we'll all make many friends during Orientation week, no need to worry.

Get excited for the 2016 Engineering Orientation's WAR OF THE WORLDS! Bring your best cheers, energy, and TO INFINITY AND BEYOND!!! See you soon!

LIGHT GREEN - The Land Before Time

MATTHEW, MATTHEW, PAUL, ROWAN, SABRINA
LIGHT GREEN HUGES

65 milllion years ago, dinosaurs roamed the earth. Fearsome beasts, the likes of which nobody has ever seen since their mass extinction. Littlefoot the apatosaurus, Cera the triceratops, and Ducky the saurolophus, yep yep yep! Petrie the pterodactyl, Spike the stegosaurus, and Chomper the tyrannosaurus. Follow them in their adventures through the land before time! Our theme is based around these cartoon characters, their dino-shenanigans, and all things dinosaur! Rawr.



DARK GREEN - Middle Earth

ANDREW, KAROLYN, PATRICIA, WEN
DARK GREEN HUGES

In the land of Middle-Earth, legends tell of the dark lord Sauron, and the one ring that would give him power to enslave the world. Lost for centuries it has been sought by many, and has now found its way into the hands of our brave team. The ring must be destroyed! My precious engineers, we need your help to complete this quest. The Dark Green Engineers - the fellowship of iron rings! Elves, dwarfs, hobbits, and wizards, together we will conquer the many challengers who may seek to steal our ring and earn our rightful place as the heroes of Middle-Earth! Adventure awaits…..so out of the Shire we go!

In the War of the Worlds, Whom Will You Fight For?

LIGHT BLUE - Under the Sea

ADRIAN, PAOLO, SAMANTHA, WOO, ALEX
LIGHT BLUE HUGES

In the beginning, the world was nothing but a vast sea. Life as we know it originated in the depths of the ocean, giving birth to the most beautiful and fantastic creatures. These creatures eventually came together and conveniently decided to form a team for Orientation Week 2016.

Life is much better, down where it's wetter! Join us on Light Blue as we emerge from Under the Sea and journey through O-week together! Our leaders may seem a bit fishy, but we promise they are awesome, hyped, and ready to make a splash! Water you waiting for??

WATER WATER WATER! BLUE BLUE BLUE!

DARK BLUE - Avatar

CAMERON, GEOFFREY, LIAM, NA EAN, DAVID
DARK BLUE HUGES

Welcome, friend, to Pandora. We live in peace, in the fruitful lands provided to us by mother Eywa. Our purpose is harmony, love, and tranquility. Within the shade of Hometree, no harm will come to you. The soul of the entire world rests here, spreading out through the forests and oceans, skies and planes. Join us; learn to tame the fearsome Ikran and journey to mysterious floating landmasses around the Tree of Souls. You will undoubtedly make many friends, and earn stories you can cherish forever. But before we depart, know this: if you come in anger, anger shall be our response. The whole world shall rise up against you, from the smallest bee to the most fearsome beast. And we shall rise up, the mighty Na'vi. Seek not to oppress us, or you will find that our bite is fierce. We shall not tolerate any disrespect of our Hometree, of our native land. But if your heart is noble and true, you have nothing to fear. This is the most complex, three-dimensional, high-resolution world in the entire universe.

LIGHT PURPLE - Harry Potter

JOSH, LUCAS, SAMANTHA, SARAH-ROSE, SOHEIL
LIGHT PURPLE HUGES

Dear First-Year Student,

We are pleased to inform you that you have been accepted to the Hogwarts School of Witchcraft and Wizardry at the University of Waterloo. Please find enclosed a list of all necessary books and equipment. You'll also be pleased to find magic, spells, friends, and engineering magic on the approaching horizon.

We await your owl by no later than August 31, 2016.

DARK PURPLE - Alice in Wonderland

ARCHIE, CASSANDRA, HOLLY, JARED, JERRY
DARK PURPLE HUGES

Fall down our rabbit hole this coming Orientation Week, and enter our Dark Purple Wonderland. There are many weird and wonderful creatures in our crazy world, like the Mech Hare, the ChEshire Cat, a Tweedle or two, the Capaci-pillar and the dangerous Hackerwocky. Try to avoid the infamous Queen of Hearts as you navigate through the twists and turns of Orientation Week with the help of the native creatures in our world, the Dark Purple Bigs and Huges. Remember, we're all mad here, but only the best people are. All of Wonderland cannot wait to see your muchness this September for Orientation Week 2016!

Do you know why a raven is like a writing desk? No? We haven't the slightest idea either.

LIGHT BROWN - Game of Thrones

ANDY, JUSTIN, MELANIE, STORM, TAIMENG
LIGHT BROWN HUGES

Welcome to the land of Westeros, first years! Get ready for a week of challenges, enginuity and fun as we, the House of Light Brown, take on the War of the Worlds. As knights in the House of Light Brown, we will fight against the other colour groups to win competitions and come out on top. Light Brown's theme is Game of Thrones, but if you don't know anything about Game of Thrones don't worry! And if you do – awesome! As upcoming engineering students, you may feel you know nothing, but don't worry! We have a group of enthusiastic leaders to lead you through the week, and we will answer all of your questions about the journey you have embarked.

"So don't fight for the King, don't fight for the other Great Houses, fight for yourselves! Defend your city! Those are brave men knocking on our door... let's go beat them!"

DARK BROWN - Indiana Jones

DANIEL, LAURENCE, MADELEINE, MELISSA, MICHAEL
DARK BROWN HUGES

Come on, all of you archaeologists, and come along with us. We have been hired by the famous archaeologist Indiana Jones to help him on one of his expeditions. He just got back from the stopping the Ark of the Covenant from falling into the hands of evil, and is now looking to return for an idol. We will need to find a way navigate the battlefield, so we can return this idol to its shrine, and stop this war of the worlds! Get ready to put your engineering skills to the test as we prepare for this adventure!

LIGHT PINK - Smash Bros.

BRYAN, ILIA, KATIE, LORI, SARAH
LIGHT PINK HUGES

Falcooooooonnn… PUUUUUUUUUNCH!!! Join us, the Light Pink team, as we smash our way to victory as the Super Smash Bros! Whether you're a Mario, a Link, or a Marth fan, prepare yourself to do battle on all of UWaterloo's stages, from the RCH dungeon, to the green fields of V1, to the CPH battleground. Together, we shall use all of our special attacks to conquer the trials that await us during Orientation Week! And trials there will be – before you can be accepted into Waterloo Engineering, you'll need to prove that you have the ingenuity and perseverance to earn your hard hat. Our enemies are tough – but master the cheers and chants of LINK (light pink), and we will be sure to win. Channel your inner Orientation Spirit and unleash a hard-hitting Smash attack on our adversaries! get ready to pick your favourite Super Smash Bros character and duke it out with your classmates in the battle royale of the year!

DARK PINK - Pokemon

AMEYA, DANIEL, JOANNE, KARAN, RAY
DARK PINK HUGES

Dear First Years,

We all leaders want to welcome you to the Dark Pink engineering orientation group! Our colour theme is... wait for it... drum roll please... Pokemon! A big majority of us grew up with Pokemon and there is no better way to beginning a new chapter in your life than with something that is fun and relatable. Engineering orientation week is a great way for you to make new friends, learn about the engineering faculty, and most importantly have fun as you transition to university life. We have a lot of fun events and activities planned for you guys, and can't wait to meet you all in September! Hope you have a great summer!

Frosh Week Event Schedule

Engineering Students' Schedule for On-Campus Residence.
Software differences noted below.

	5 MONDAY	6 TUESDAY	7 WEDNESDAY
8:30 a.m.	MOVE-IN / CHECK-IN Residences and Student Life Centre * Also on Sunday, September 4.	HQ TIME Colour Group Headquarters	JUNKYARD WARS Village 1 Green
9:00 a.m.		MEET THE TEAM Colour Group Headquarters	*Lunch @ 11:00 a.m. Village 1 Green
9:30 a.m.		FACULTY WELCOME / DEPARTMENT HANGOUTS Various Locations	
10:00 a.m.			
10:30 a.m.		DEPARTMENT LUNCHES Various Locations	
11:00 a.m.		EARN YOUR HARDHAT Various Locations	WARRIOR WANDER Various Locations
11:30 a.m.		AERIAL PHOTO B.C. Matthews Hall Green	
12:00 p.m.			
12:30 p.m.			
1:00 p.m.	WELCOME * Also on Sunday, September 4.	SINGLE & SEXY / BLACK VS GOLD Physical Activities Complex/Various Locations	SINGLE & SEXY / BLACK VS GOLD Physical Activities Complex/Various Locations
1:30 p.m.			
2:00 p.m.			
2:30 p.m.			
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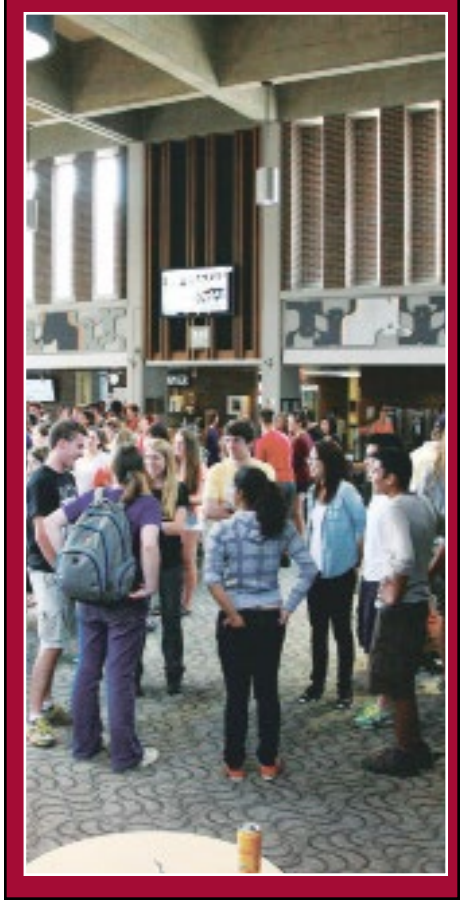
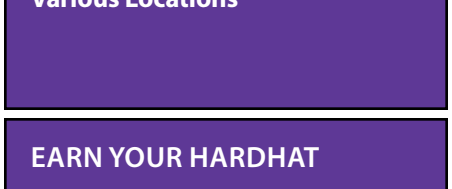
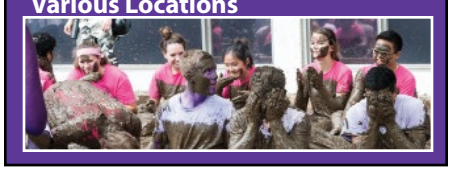
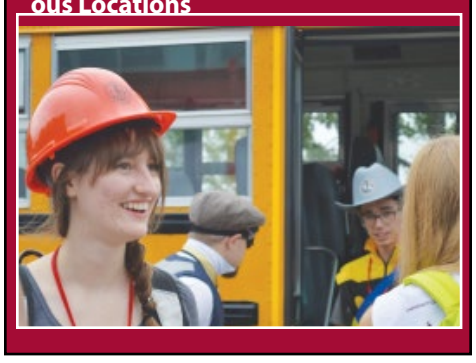
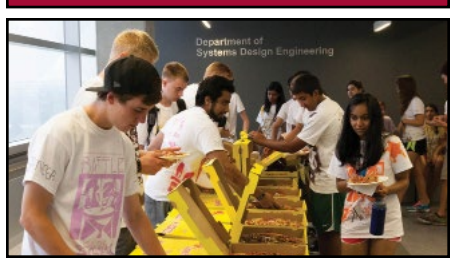










Engineering

Faculty Welcome

Meet the Dean of Engineering, the first year academic advisors, and some members of the Faculty of Engineering at this event!

Traditions

Learn about all the traditions that are upheld by the Waterloo Engineering Society and by Engineering Orientation.

Department Hangouts

A sit-down event where students are split up by department and talk to upper year leaders in the same department.

Earn Your Hard Hat

Earning your Hard Hat is one of the oldest traditions in Waterloo Engineering Orientation. You work with your fellow first years to complete a set of tasks with the end goal of earning your prestigious Waterloo Engineering Hard Hat. You'll be needing that hard hat for the rest of the week!

Aerial Photo

Every year, all first year students assemble in the formation of a shape relating to the theme of Orientation Week. This is one of the only times until graduation that the entire class of 2020 will be in the same place for a photo. The finished product will hang in POETS for the duration of your undergraduate career and beyond!

Single and Sexy

A theater performance put on by upper year students which covers many issues that students might run into at University in a very lighthearted and informative manner.

Black vs. Gold

A series of mini-games hosted by all faculties.

Junkyard Wars

Our flagship event, Junkyard Wars, is exactly what its name implies. Colour groups are challenged to solve problems and complete challenges using only recycled materials and scrap parts. This event is the true test of ingenuity, creativity and plain old smarts.

Warrior Wander

Several specialty events which allow you to learn about the Boardwalk Shopping Center, uWaterloo's Online Services, as well as helping with a mural in Waterloo Park.

Student Teams Showcase

All student design teams and engineering student groups on campus are set up in an area where they can showcase what they do and what they have to offer to engineering students.

Black and Gold Day

Show your warrior pride at a sports game by rocking Waterloo's official colours.

All photos credited to Frosh Media & EngSoc.

Engineering **Academic** **Cross-Campus**

8 THURSDAY

CLASSES
Various Locations

STUDENT TEAMS SHOWCASE
E5 Sedra Design Centre

9 FRIDAY

CLASSES
Various Locations

CHOOSE YOUR OWN ADVENTURE
Student Life Centre/ Physical Activities Complex

10 SATURDAY

BLACK AND GOLD DAY
Warrior Field / Columbia Icefield

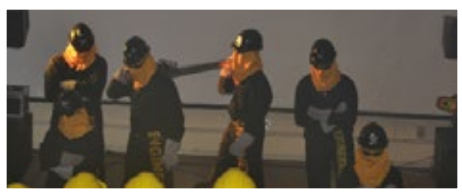
CLOSING CEREMONIES
Hagey Hall Theatre/CPH Courtyard

MONTE CARLO
Student Life Centre/ Physical Activities Complex
***Continues till 2am**

11 SUNDAY

ENGSOC DAY
POETS Patio / Carl Pollock Hall

SCAVENGER HUNT
Engineering Quad/Various



Monte Carlo

A casino themed event where everyone shows up in their fanciest outfits and hits the tables (no gambling involved).

EngSoc Day

Bouncy castles, dunk tanks, cotton candy, charity headshave and everything EngSoc! Come out to meet the Engineering Society Executives and learn about what EngSoc has to offer you!

Scavenger Hunt

Complete your scavenger hunt list while enjoying engineering mini-games. There are countless activities, and also a never-ending acquisition list with items for you to collect. This is the final flagship Engineering event and is sure to not disappoint!

Welcome to First Year Engineering

Greeting from the First Year Office

AJOY OPAL
DIRECTOR, FIRST YEAR ENGINEERING

A warm welcome to all first year engineering students and congratulations on joining one of the finest universities in Canada. Starting university will provide many opportunities for personal and academic growth: to make new friends, to visit new places, to develop critical analysis skills, to gain valuable work experience, and to develop a career of your choice. Your undergraduate degree will take approximately five years to complete and it is important that you start this process with care and planning. The First Year Engineering Office is here to help you plan and manage the transition from high school and home to a new environment in the university.

Starting university is also synonymous with becoming an adult. You have the freedom to do what you like and also the responsibility of taking care of yourself. It is your choice to attend classes, complete assignments or write exams; however, we highly recommend that you participate in all of these activities, as they will benefit you greatly. The decisions that you make now will have far reaching consequences later in your life. So, choose wisely! Let me give you some tips on what to expect and on how to succeed in engineering at Waterloo.

What to Expect in Your 1A Term

Each one of you will have approximately 30 hours per week of scheduled lectures, tutorials, and laboratory periods during the 1A term. In addition, you will have to put in 20-30 hours per week to study, review concepts, and to finish assignments and reports. This adds up to 50-60 hours per week of work; it is more than a full time job! To manage this workload, you may have to change your study habits and how you manage your life. Let me give you some tips on things that work, and some things that do not work:

• Attend classes. Follow along with what the instructor is teaching in class. Ask questions. During classes do not be distracted by Facebook, Twitter, movies, or games on your computer or smartphone.

• Review your course material and complete assignments on a regular weekly basis. Do not try to cram the day before exams.

• Understand the underlying concepts that you are studying in class, instead of memorizing formulae. Solve problems to evaluate your understanding of concepts.

Balance your Life

Your first thought when you join university may be at either end of two extremes: either study-study-study, or—possibly—party-party-party. Neither of these extremes is the ideal choice and, as usual, the best choice lies somewhere in between. Let me suggest that everyone is made up of three major parts: mind, body and soul. To be successful in life you need to nurture all of these parts because they depend on each other for survival. For your mind you need to spend time studying and developing critical analysis skills; for your body you need to eat, sleep, and exercise regularly; and for your soul you need to relax with friends or take part in extracurricular activities. Not only do you have to nurture all three parts, you need to balance the amount of time spent on each activity, without ignoring any aspect of your life.

You will also find that time will become an important resource that is in short supply during your undergraduate career. There will never be enough time to complete all the tasks to the degree of satisfaction that you would like. Thus, you will have to set priorities and spend an appropriate amount of time on each task. To help you with this process it is important that you make a schedule for all your activities. Not only should you make a schedule, you must follow it and make adjustments to it as you go along. In summary, there are three major things to consider during your undergraduate studies. They are neither study-study-study, nor party-party-party. Instead, they are mind-body-soul, and the balance between them.

Ask for Help

All engineering programs are demanding and have heavy workloads. The workload may result in limited time to understand a concept, finish an assignment or project, or prepare for an exam. The lack of time may also cause stress in your life. In these situations you will need help with your studies or personal life. Keep in mind that asking for help maybe the better choice in many situations, as opposed to doing everything yourself or doing nothing.

There are many sources of academic help available at the university. First will be your classmates and friends studying the same or similar subjects. It will be beneficial to form study groups with other students taking the same course. Help is also available from your course instructors and teaching assistants during lectures and tutorials, and outside class hours by making appointments to see them in their office. Additional help is available through special staff and tutors hired by the First Year Engineering Office to help you with your courses. The First Year Engineering advisors are available to provide academic counselling, for example, in case your academic performance is not meeting the standards we expect of all students. Please make use of all these resources.

To get help with stress and personal issues, and to learn study and time management skills you can come to Counselling Services. There are Engineering Counsellors available within the First Year Office, or you can go to Needles Hall for additional university Counselling Services. For your physical health you have access to doctors and nurses on campus at Health Services.

Information and access to all of these kinds of help can be obtained by coming to the First Year Office in CPH 1320, or by calling extension 84761 during normal working hours.

Be Professional

Engineering, like many other programs—such as, medicine, law, and accounting—are called professional programs. The reason is that the work done by these professionals can, and does, affect the lives of other people. As a result, professionals are expected to adhere to high standards in their dealings with other people and amongst themselves. To help you develop as a professional, we expect you to behave in a professional way with everyone, including your fellow students, teaching assistants, instructors, and university staff. Any unprofessional behaviour during your university career can have serious consequences and, depending upon the seriousness of the misdeed, these can range from to loss of marks in a course all the way to expulsion from the university.

Being a professional means being ethical, courteous, and considerate in all your dealings, and communicating your ideas and thoughts clearly. Being professional in a classroom will mean not disturbing your fellow students or the instructor by talking in class. Being professional to your fellow students will mean treating everybody equally and without prejudice, regardless of their race, colour, creed, sex or religion. Being a professional means not to lie, cheat, or copy on assignments and exams. Being professional means giving credit where it is due, without misrepresenting somebody else's work as your own. Being a professional is all about doing the right thing at the right time. If you are ever in doubt about if an action is professional or not, ask someone in a position of authority to help you decide.

I wish you all a successful career in engineering and a enjoyable time at the University of Waterloo.

Engineering Exchanges

Where the world becomes your classroom!

PROF. RICHARD CULHAM, CINDY HOWE
ASSOCIATE DEAN, INTERNATIONAL; ADMINISTRATIVE COORDINATOR, ENGINEERING EXCHANGES

Welcome, class of 2021, to Waterloo Engineering!

The engineer of the future will need to be a truly global engineer, where geographical boundaries will be of relatively minor importance while communicating and working with engineers of all nationalities will be essential. An international exchange could be your first step along this path!

What is an International Exchange?

An international exchange is a program that allows students to spend one or two academic terms at one of our partner universities while earning credits toward their Waterloo degree.

International Exchange is available to all undergraduate students that maintain an overall grade point average of 70% or higher and typically takes place in your 3A or 3B academic terms (or both!!). Normally, you will lose no time on exchange and will graduate with your class.

Why Should You Start Thinking About it in 1A?

It's a great opportunity that should be high on your list of things to plan for, but it needs preparation, organization, and forethought. You could be among the 15% of your class who goes on this amazing adventure and learning experience.

What Are Some Benefits of Exchange?

If you've lived most of your life in one country in one culture, exchange will truly be an eye-opening and life-changing experience for you. It can open your eyes to the outlook, traditions and culture of your host country. You'll meet other exchange students from all over the world and make life-long friends and contacts.

The Faculty of Engineering has exchange partnerships with over 80 top-tier universities in about 30 countries. You'll need to decide which best suits your needs: most of our exchanges are restricted in numbers, some are open only to certain disciplines of engineering, and for some you need to learn (or refresh) your language skills if the language of instruction is not English. In some of our exchanges it's easiest to go for a one-term exchange, while for others two terms, or even a full year including a work term may provide a better fit.

All this is a part of planning for your future which could take you anywhere in the world!

To get started, visit our website (search for "Engineering Exchanges" at the UW home page) for all information, instructions, and forms you'll need. If you are on Facebook, look for the "UW Engineering Exchanges" group, which is specifically for outbound students and for those who have been on exchange, and is moderated by the Engineering Society (EngSoc) and the Faculty Exchange Office.

Also be sure to contact Cindy Howe in the Faculty Exchange Office (Carl Pollock Hall, Room 3658), eng.ug.exchange.askus@uwaterloo.ca

Don't let this chance pass you by! You will need more than a year of lead-time after completing the application process before you can go on exchange.

What about tuition fees?

You will pay your regular Waterloo tuition fees to Waterloo.

Finally, an exchange is great for fun, travel and adventure. You'll visit parts of the world that stay-at-home students may never experience. Don't take our word for it; talk to students who've gone, or read what they have to say:

"Going on exchange is the BEST decision I've made in my undergrad life! It has helped me grow as a person from learning in a new environment, making friends around the world, and seeing things

in different perspectives. Not to mention all the amazing travels you can do on an exchange." - LinLin Chen, Management Engineering

"In my opinion no classroom is ever an ample substitute for the experiences of the real world and nothing provides the individual more perspective than the opportunity to travel abroad. As our global world seeks to address the pressing challenges of our age, such perspective is becoming invaluable." - Matthew Benson, Civil Engineering

[writing of a camping experience while on exchange in Chile] *"A little village of tents beneath the mountains. I'd never gone hiking in such a busy place, but I loved the suppertime gatherings around propane stoves, passing spices round to other travelers, trading stories."* - Tessa Alexanian, Systems Design Engineering

WATERLOO | ENGINEERING

TransCanada Corporation Employment Information Session

EXPLORE OPPORTUNITIES WITH TRANSCANADA, A LEADER IN THE SAFE, RELIABLE AND RESPONSIBLE OPERATION OF NORTH AMERICAN ENERGY INFRASTRUCTURE.

Join company representatives at TransCanada Day in Waterloo

Employment Information Session

Thursday, September 29, 2016 | 5:00-7:00 p.m.

TransCanada Live-Link Facility
Engineering 5, Room 3102

Food and refreshments will be served.

TransCanada

Please **RSVP** via the info sessions calendar on the Co-operative Education website, at **ceca.uwaterloo.ca/students/sessions.php**.

UNIVERSITY OF WATERLOO

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Engineering Programs at Waterloo

Architecture

RAIN MAKI AND JASON MCMILLAN
4N ARCHITECTURE

As you may have discovered already, we don't call Waterloo home, but rather a historic building at the heart of the old Galt neighbourhood in the City of Cambridge. The refurbished Riverside Silk Mill sits on the banks of the Grand River and will soon become your home sweet home.

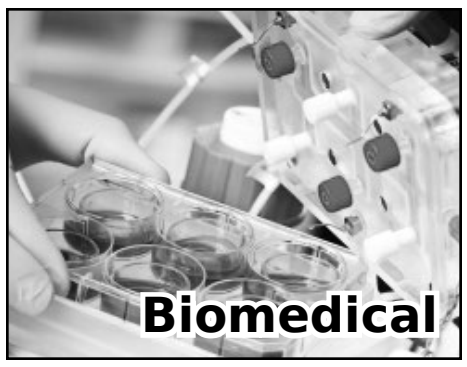
In your first year you'll be tossed into a whirlwind of learning, challenging you to develop knowledge in architectural design, building science, cultural history and visual communication. Expect to become immersed in the world of architecture, indulge in all things design at the Musagetes architecture library, explore living metropolis of New York City, and maybe even get an exacto knife cut or two along the way.

While academics are a huge part of first-year architecture, it is also time to explore your own interests with your new classmates. Our campus offers a wide variety of extracurriculars to choose from, including Waterloo Architecture Students Association (WASA), BRIDGE, F_RM-LAB Build, coffee houses, yoga mornings, hockey evenings and much more. We join our Engineering friends for Archineering events and Of Term Parties. After all, we're only a short bus ride apart!

The school has a dynamic and tight-knit community, where your peers are your greatest resource. The third floor studio is full of creative energy, where ideas spark, people collaborate and friendships form.

Best of luck, and much love from your new family at Waterloo Architecture!

Biomedical



CAMERON SOLTYS
FORMER EDITOR-IN-CHIEF

Welcome, Biomedical Engineering students, to your new home at Waterloo. Your department may be the infant of the family, but that just means we love you all the more!

Your time at Waterloo will expose you to all sorts of wonderful ideas and technologies as you learn how to marry technology with the increasingly-important field of medicine. You will learn to work with doctors and policy makers, biologists and engineers to speed you on your way to a successful career in the the eternally growing field of technology-based medical care.

Upon graduating this program, you will have the ability to understand and model complex biological systems, and the skills and experience to design new tools and products to improve the lives of people all around the world. That may seem far away as you toil through your more general first-year courses, but stay sharp as these general concepts will be reused and reinterpreted as you get into more complex concepts like biology, digital signals, medical imaging, and design.

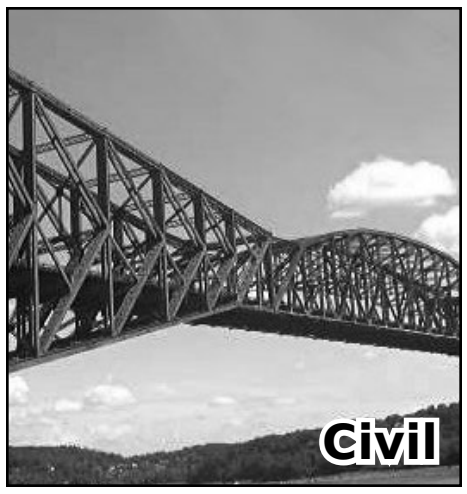
Learn from the class that went before you, and broaden the path even more for the generations of students that are sure to follow after.

Chemical

WILL WILMOT
4A CHEMICAL

Congratulations class of 2021!! Now that you're here, get ready to learn about distillation, energy balances, process controls and well, I guess a little bit of chemistry mixed in there. Along with first year comes preparing a resume, many hours spent slaving over Excel and TONS OF FUN!!! Once you're through most of your first year, you'll learn more about separation processes and bioprocess engineering which are studied by chemists and scaled up by future engineers like you! Most of your first year courses are fairly general, Chemistry, Linear Algebra, Calculus, and Physics with a lot of concepts being review of material covered in high school. Don't be afraid to go to help sessions, ask a classmate or join other sections of the core classes for a fresh perspective! In addition to the Engineering Society, the Chemical Engineering Student Society (UW CESS) also puts on fun events to take your mind off things. Now is the time to find a good work-life balance before the going gets tough!

Civil



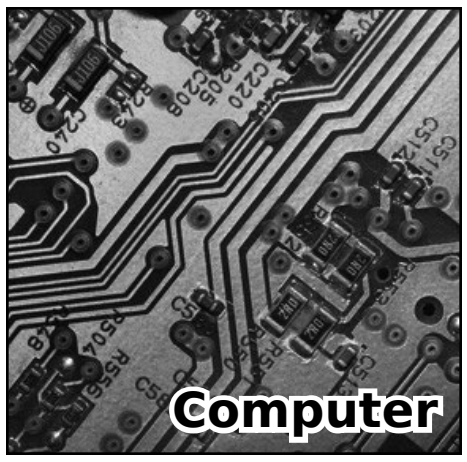
NANCY HUI
CIVIL '15

Welcome, class of 2021, to the wonderful world of civil engineering! Civil engineering is the second oldest discipline of engineering, after military engineering, and deals with road networks, transport systems, excavations and mines, structural systems, sewer systems, material sciences, and construction scheduling, to name a few. In first year, you will take general courses in chemistry, calculus, physics, and linear algebra (Protip #1: Once you finish linear algebra you'll want to forget it forever. But don't - it'll come back to haunt you in third year.). You will also learn how to survey on Columbia Lake, identify rocks and minerals in the Earth Science labs, program with Matlab, and loads of other impressive things.

Take advantage of your co-op terms to experience different work environments – and not just things you think you'd want to do. Visit construction sites. (Protip #2: if you don't have a driver's licence, get cracking on it RIGHT NOW.) Spend a work term in the oil sands. Work in the public sector. Work in the private sector. By the time you reach 3rd year, you'll know which areas you'd like to specialize in, and will be able to take the corresponding technical electives in water resources, structural engineering, transportation systems, and more!

Until then, don't be afraid to seek help from your TAs or your profs! Ask questions in class and visit them during office hours. But also remember there is a world outside the campus and people outside your class: get involved and write for the Iron Warrior, represent your class at EngSoc meetings, or compete with the Concrete Canoe and Concrete Toboggan teams.And don't forget: CIVILS ALWAYS WIN.

Computer



ANTHONY CLARK
COMPUTER '16

Do you like calculus? Do you like Boolean algebra? Do you like designing multistage differential amplifier circuits at 3 in the morning? Great! You've come to the right place!

Partial joking aside, welcome to Computer Engineering! You probably already have an idea of the problems Computer Engineers work on – digital hardware, firmware, and even some analog circuits for when there are no Electrical Engineers nearby. In the year ahead you will build up skills in the fundamental areas of Computer Engineering, including Physics, Calculus, Programming, Circuits, Digital Logic and Discrete Math.

The best advice I can give is to ensure you put a good amount of effort into your courses, you will thank yourself later on! On the other hand, do make sure to get involved in things outside of classes – sign up for an intramural team, or join a few clubs. Wondering how to find the right balance? This is one of the most important challenges each of you will face while transitioning into University, take advantage of the resources available to help you figure it out (TA's, Engineering Society, First Year Office etc.)

Finally, some of your will be introduced to co-op in the next few weeks. While it may seem daunting, Computer Engineering opens up some fantastic opportunities in the tech world. Spend some time perfecting your resume and practicing for interviews, and you may just find yourself on your way to your dream company.

Now go ahead and begin the best 5-7 years of your life!

Electrical

AUSTIN COUSINEAU
ELECTRICAL '15

Welcome to the University of Waterloo, and congratulations on choosing Electrical Engineering! You have an exciting path ahead of you. This year will be full of new experiences. You will need to enforce good study habits, and put the effort in to succeed. You will be taking a wide variety of courses ranging from circuits, programming, math, physics and more. Do your besEt to study them well, as what you learn will be needed in courses and the workplace later on. First year will be full of exciting firsts for most of you, such as interviews, internships and independent life. Make sure you put a lot of effort into your resume, and make sure to take advantage of the resume critiques run by our lovely Engineering Society. You are sure to encounter some tough times as you adjust to the new world that is university. Everyone will, so don't be afraid to reach out for help when you need it. Take advantage of your TAs, professors, advisors and classmates – you're all in this together. But while this is all very important, don't forget that university is a social place as well. Make time to go the various events on campus, meet people and check out the various student teams that would love to have you join and help out.

Environmental

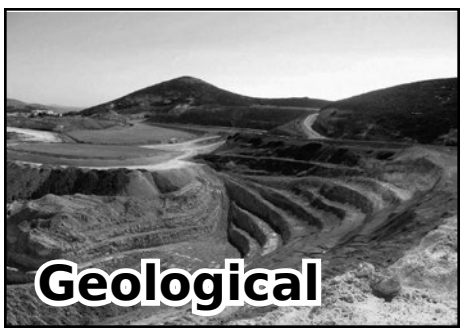
KRISTINA LEE
ENVIRONMENTAL '15

Welcome and congratulations on being selected to be a part of Environmental Engineering at the University of Waterloo! We're happy to have you and hope you enjoy your 5 years here.

Environmental engineering focuses on the chemical and biological world around us, with a strong focus on water systems. Your first two years, although not the most fun, are very important to create a foundation of knowledge you'll need in your upper year courses. Upper year courses are where you'll get to delve deeper into topics of interest to you. One of the best parts about environmental engineering is that we get to do quite a few outdoor labs! In 1A you'll be outside for about 5 weeks learning the basics of field surveying through hands-on field labs. The information you gather there will help you determine a solution to the problem posed in your concepts course.

You may feel bogged down with work but remember to have fun, hang out with your class, and talk to upper years. We can't wait to meet you and have a fabulous time during O-Week!

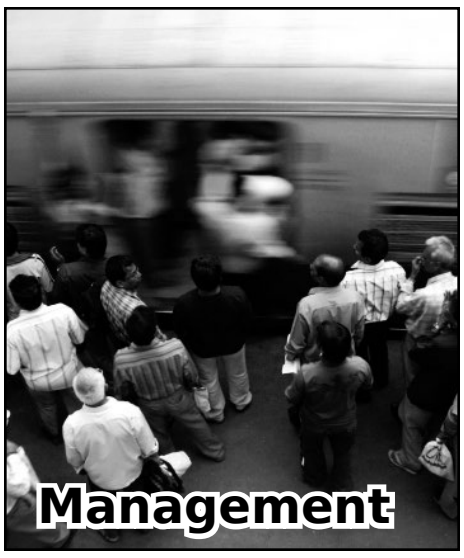
Engineering Programs at Waterloo



CHRISTY ROUAULT
GEOLOGICAL '15

Welcome to GeoEng! Geological engineering is a dual faculty program in the Faculty of Engineering and the Faculty of Earth and Atmospheric Science that can lead you to a wide variety of fields including geology, hydrogeology, hydrology, geotech, geophysics, geochem, geohazards, mining, oil and gas, and many more.

Whether you want to get to work via helicopter and get your hands dirty hiking in the mountains or you want to be a sophisticated engineer in a sky scraper in Toronto, this is the field for you. You are on your way to a career with many unique opportunities including hands-on field work, working abroad, and a high paying salary. Field trips across Ontario and an international trip to locations like Peru and Iceland are some of the highlights of your next five years.As a GeoEng in a tight-knit class you'll graduate with 20 best friends instead of 200 classmates. Nicknamed by Professor Unger as "engineering's best kept secret," we are a rare kind making us all the more valuable! Work hard, play hard, and get to know and love the people who will be your "rock" for the next five years.



PALLAVI HUKERIKAR
2T MANAGEMENT

Hello class of 2021, and welcome to Management Engineering. We're so glad that you have decided to join us.

Management Engineering is an extremely unique program that was designed to help students understand, design, implement, and manage complex systems upon which organizations rely. Management engineers combine their knowledge of mathematical modelling, information systems, and behavioural science to develop optimal solutions. You'll probably find yourself having to explain what Management Engineering is a lot of times throughout your time here, but don't worry, soon enough you'll develop an amazing explanation of your own.

Throughout the duration of the program you will learn about, and take electives in, three main themes: Operations Research and Supply Chain Management, Information Systems, and Management of Technology. Operations Research deals with quantitative models that are applied to coordinate activities in areas such as manufacturing, distribution, logistics, and supply chain management. Information Systems focuses on the creation and use of computer technology to support effective decision-making. Finally, the Management of Technology theme builds on the foundation of topics in finance, accounting, economics, and organizational behaviour while focusing on organizational issues related to managing technological change.

With such a diverse curriculum, it's no surprise that Management Engineers can be found practically anywhere. From finance to healthcare, or telecommunications to software, there is no industry that can't benefit from Management Engineering.

Thanks to the small class size and the fact that the program only has one stream, you'll easily be able to bond with your classmates over the next five years. Make sure to reach out to upper years if you ever need any help, and look out for MEET in your first and second term.

Welcome to the Management family! We wish you the best of luck in your first year!

LEILA MEEMA-COLEMAN
MECHANICAL '16

Congratulations 2021 Mechanicals on starting the five most exciting years of your life! So what can you expect in your first year? Well you will learn a little bit of everything. Mechanical is very general in first year, learning lots of physics, calculus, and materials, then specializing in upper years. First-year Mechanical Engineering will provide you with opportunities to learn about design principles, AutoCAD, and SolidWorks. You will meet your WEEF TAs who are fantastic upper years that are there to get to know you and help you succeed in your ME 100/101 course (best course ever by the way!). The other exciting part of your first year experience is coop! Mechanical is so diverse we have the opportunity to work in almost any engineering industry so whether its automotive, materials or building systems, you will have the chance to try it out first hand. Lastly, even though school and grades are important, first-year is about trying new things so get out there and join some clubs, student teams, WEEF, the Engineering Society or one of the other millions of opportunities Waterloo has! If you have any questions or need advice I am always around and happy to chat :)

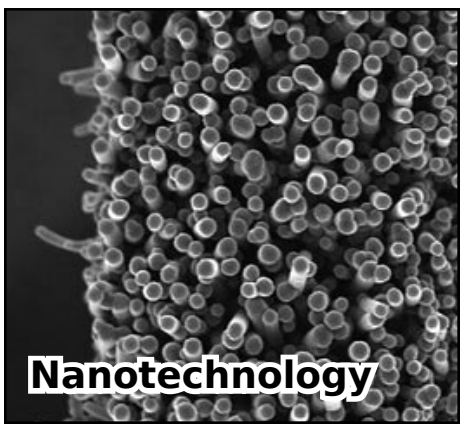
SAMI RAHMAN
MECHATRONICS '16

"You're in mechatronics engineering? Whoa, that sounds awesome, do you make like, Transformers?" That's how most of your first conversations might go with the friends you'll meet in first year. Feel free to confidently answer, "Probably."

Congratulations and welcome to one of Waterloo's standout multidisciplinary engineering programs, also known as Tron. Get ready to carve your undergrad legacy with an eclectic combination of electronics, mechanical engineering, controls, and computer science. You'll be challenged in each of these unique directions, making you an experienced, well-versed engineer and a valuable asset for cutting edge, high profile co-ops.

First year's going to fly by with a tonne of exciting hands-on projects that'll help solidify your interests. You'll program and assemble a robot, optimize a fuel cell car, build a truss bridge, tear apart an engine, and draft by hand and with software.

You're at the front of a roller coaster with way more ups than downs. Waterloo's mechatronics alumni are notorious for making waves internationally. I can't wait to see what you're going to accomplish, Class of 2021.



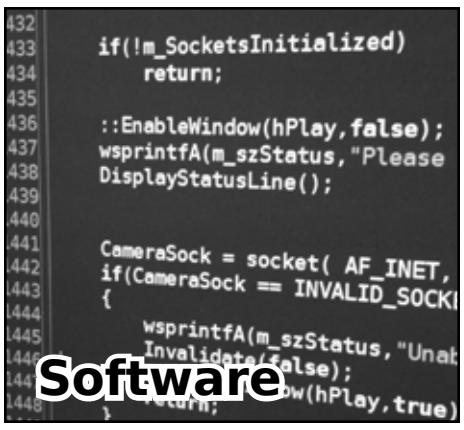
MEAGAN CARDNO
4N NANOTECHNOLOGY

Welcome to the family, newest generation of Nanos! I see you ogling the QNC as you shuffle around campus. I know, I know, it's beautiful, you lucky ducks. Back in my day, we had to wait fifteen years—uh, wait, maybe that's a story for another day.

You'll grow to hate every iteration of joke relating to Schrödinger's Cat and superposition, and might have the occasional nightmare regarding amino acids, but it'll be worth it for everything that you'll learn in the wonderfully diverse range of courses you can look forward to taking— organic chemistry, electromagnetism, semi-conductor physics, quantum mechanics, biochemistry, and calculus. Lots of calculus.

Like all programs and faculties, first term will be a rush of new experiences and challenges, but you, young nano, will be able to face and conquer them all with enough perseverance and smart thinking. Now's the time to figure out what balance of work, play, and sleep works best for you (try not to skimp out on that last one too much). A lot of the stuff you learn in first year will be the foundation of your upper year courses, so be sure to keep savvy, and remember: MATLAB is love, MATLAB is life.

Keep your eyes and ears open for details about the Nano Barbeque held every term, which will give you an opportunity to talk with other students and professors in the program. Talk to your Bigs and Huges, upper years, professors, and of course, classmates! It's a small world, after all.



JOSHUA KALPIN
SOFTWARE '16

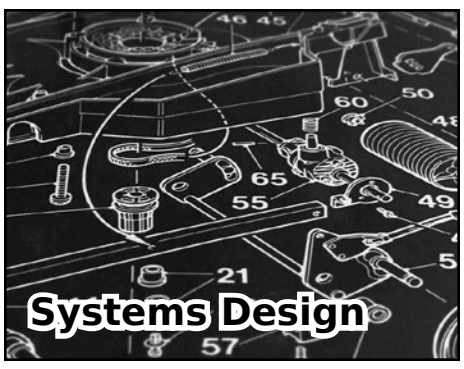
Welcome to the land of Software Engineering, 2021 Softies. You'll learn quickly that being called a Softie is actually an awesome thing, because we aren't soft at all. Software Engineering is a unique program in that you are fully in both the Math and Engineering faculties. This means you get to experience the best of both faculties !

In Software Engineering you'll learn everything about how computers and the software that runs on them works. This ranges from the design and implementation of complex software systems to the physics and circuits that explain how computers function.

Your first year will consist of a strong base of engineering and math fundamentals, and you may notice that you share a number of courses with other engineers and math students in other programs. As you progress through the program this will quickly change and you'll get to experience a slew of unique and interesting courses.

Software Engineering is a stream 8 program. This means you have the first eight months of your time at Waterloo to adjust to university life and the program itself before you embark on your first of many co-op terms. Don't worry about getting a job, JobMine, the school's job application service has a ton of jobs to apply to.

Lastly, don't be a stranger! Software Engineering resources are all on the second floor of the Davis Centre (DC), including the labs, lounge and administrative offices. Best of luck to you all. We're super excited you joining us and hope you have an amazing time here!



KEVIN LAU & CLASS
3N SYSTEMS DESIGN

One of the first things you'll memorize is the definition of Systems Design Engineering (SYDE), although in reality you'll spend the next five years defining what it means to you through electives and extracurricular activities. As the most interdisciplinary engineering program, you'll take courses from other engineering disciplines and unique design courses, culminating in unprecedented elective-flexibility in your upper years that will allow you to shape your degree.

Your home for the next five years will be the sixth floor of E5, where you'll have all of your core classes with your classmates, who will be some of the most well-rounded students from across Canada and beyond.

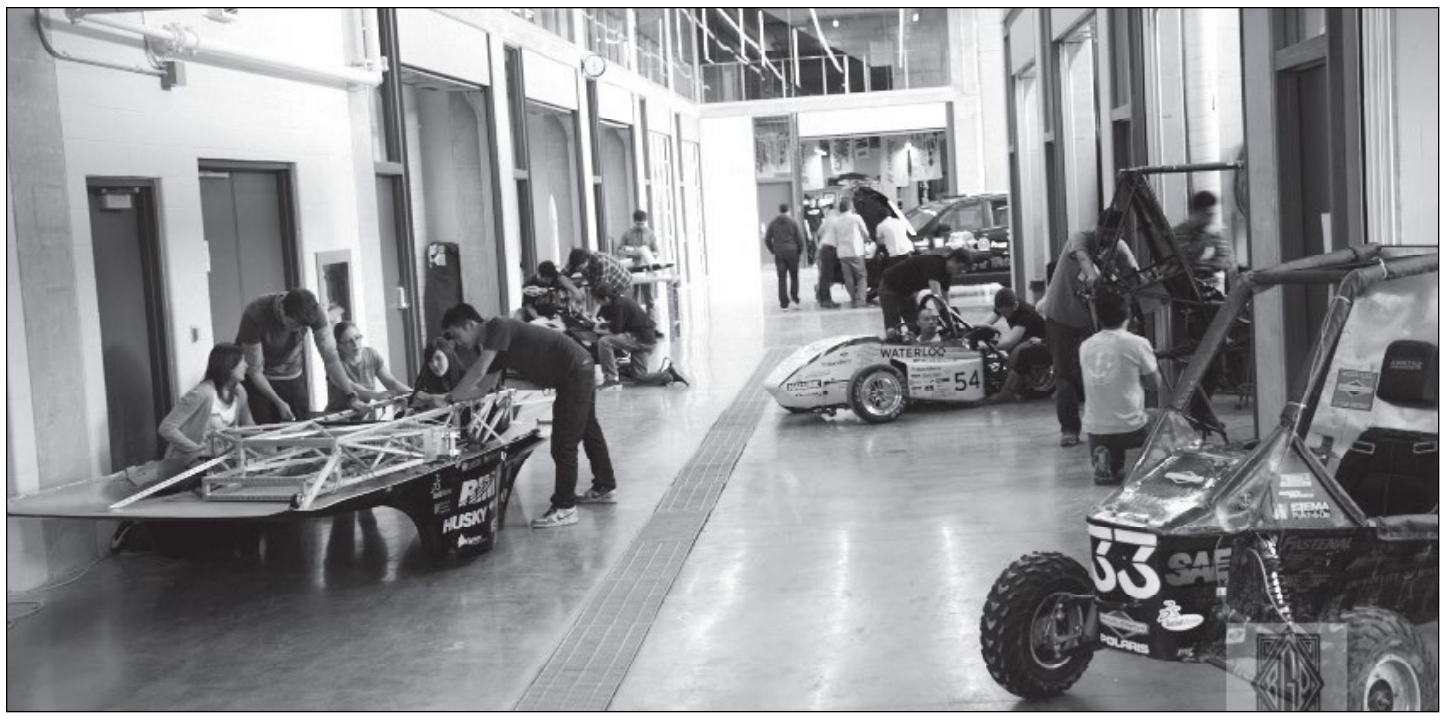
When it comes to co-op, the job opportunities available to us reflect the flexibility of our program. SYDE students have been hired for everything from software development to project management to working at hedge funds or oil refineries, in countries all over the world. Take advantage of your co-op terms to explore your interests.

Don't be afraid to ask the hard questions and actively seek answers. Always strive to make the most of your time here. SYDE will be challenging, but take some time to enjoy the journey. You're in for an awesome ride!

Welcome to the Family!

Sedra Student Design Center

Home of Some of the Best Innovation at the University of Waterloo



A view from the lower garage of the SDC, showing some of the teams working on their projects

PETER TEERTSTRA
DIRECTOR, SEDRA STUDENT DESIGN CENTRE

The Sedra Student Design Center (SDC), located on the first and second floor of Engineering 5, is home to twenty-eight of the Faculty of Engineering's student competition teams. The largest facility of its kind in North America, the SDC provides work bays for teams as well as special purpose spaces for sanding, painting, engine testing, electronics assembly, and more.

Here are some typical questions that students have about student teams:

How do I join a student team?

Simple… email or walk into the team work bay and say "I want to join your team." Recruiting new members is one of their biggest challenges for a team—so they will be really happy to meet you!

Why should I join a team?

Being a member of a student team looks great on your resume; companies are always looking for students with practical, hands-on experience. Also, being on a team gives you lots of experiences you won't get in a class room. And it's fun!

Will I be able to handle the extra work load?

Absolutely! You can be an active member of a student team by participating as little as 1-2 hours per week.

The SDC is holding a Recruiting Open House on Thursday, September 8 from 4:00 to 6:00 PM. Be sure to stop by to visit with the teams and get more information.

Enactus Waterloo

ASHLEY MA
ENACTUS DIRECTOR

Enactus Waterloo is a student-led organization dedicated to improving the quality of life and standard of living. We solve real-world problems by implementing projects which achieve the triple bottom line: people, planet, and profit.

entrepreneurial—initiating business ideas and solutions with passion and innovation.

action—the experience of sustainable impact, activated with integrity.

us—student, academic, and business leaders collaborating to create a better world.

At Enactus, not only do we help to make a difference in the community, we as the members also are able to learn and develop strong business and leadership skills that are essential to future endeavors. Our projects aim to inspire hope, create opportunity where little existed and ultimately improve lives and strengthen communities.

If you are a motivated individual who wishes to make a difference in the community, like our Facebook page at https://www.facebook.com/EnactusWaterloo/ to keep up to date with recruiting information and other news. You are always welcome to send us a message and we will always reply within 24h.

Women In Engineering

LYNDIA STACEY
WIE OUTREACH SQUAD

Why join the Squad?

§ Share your passion for engineering with fellow students!

§ Welcome new students and applicants to the University of Waterloo!

§ Inspire the next generation of female engineers!

The members of the WiE Outreach Squad are committed to helping out at all major outreach events during a specific term. Members of the WiE Outreach Squad are selected by application.

These amazing volunteers are expected to volunteer about three-four Saturdays over the course of the term.

There will be a planning meeting prior to each event..

Squad members will receive some sweet apparel and targeted training.

This is an excellent opportunity for students who want to develop their soft skills such as facilitation, presentation, event planning and program delivery.

Engineers Without Borders

ALEX VASILE
ENGINEERS WITHOUT BORDERS

Engineers Without Borders (EWB) Canada is a one of the fastest growing, critical thinking international development organizations in the world. Here at Engineers Without Borders, we're all about creating sustainable change to the systems that cause and perpetuate poverty. A lot of people think that means sending people overseas to directly perform engineering work, such as digging wells or building bridges. Well, believe us when we say that doesn't work on its own, at least not in terms of sustainability. Instead, we focus on working with local communities and ventures in the areas of the world that we want to help. We provide them with support and guidance, helping them solve problems while they remain fully independent. At the same time, we also do a lot of work here in Waterloo. We, with the help of other on campus groups, have been pushing to get more Fairtrade certified goods on campus. Of course, it's not all hard work and no play. We participate in the yearly Run to End Poverty, host our Gala night, and much more. For more information, check out our website and Facebook page.

Steel Bridge Design Team

KYLE PELLERIN
STEEL BRIDGE TEAM

The ASCE/AISC Student Steel Bridge Competitions is an annual event in which a team from any post-secondary institution with an ASCE chapter can participate. In general, each team is challenged to design a 20' long modular bridge entirely out of steel under several constraints, and manufacture this design in time for the competition. The mission of the competition is to increase awareness of real world engineering issues such as special constraints, material properties, strength, serviceability, fabrication and erection processes, safety, aesthetics, project management, and cost. The UW Steel Bridge Team has competed in this design competition for the past two years, as well as the newly established CSCE/CISC Student Steel Bridge Competition this past year.

Concrete Team

CONCRETE TEAM
CONCRETETOBOGGAN.UWATERLOO.CA

The University of Waterloo Concrete Toboggan team competes in the annual Great Northern Concrete Toboggan Race (GNCTR), the longest running student-based engineering competition in Canada. The Concrete Canoe Team competes in the Canadian National Concrete Canoe Competition (CNCCC). The teams' goals are to design, build and race a toboggan & canoe made entirely from concrete. Teams are judged on performance, technical design and team spirit.

Waterloo IISE

NOAH BEZAIRE
UW IISE CO-PRESIDENT

UWaterloo IISE is the University of Waterloo's Institute of Industrial and Systems Engineers Chapter. Our organization aims to provide knowledge, training, and networking opportunities that inspire students to become technically and socially competent Management and Systems Engineers. Specifically, our chapter strives to provide avenues for growth academically, professionally, and socially through unique events and services.

The Chapter was formed in 2012 by an inspired group of Management Engineering students and is a way for students to come together in the pursuit of gaining a deeper understanding of the discipline. Further, the chapter seeks to educate others about Management, Industrial, and Systems Engineering to network with professional Engineers, and to learn from other Industrial & Systems Engineering institutions.

Waterloo Satellite Team

JUSTIN ROBINSON
WATSAT

WatSat is the University of Waterloo's team participating in the Canadian Satellite Design Challenge (CSDC). The CSDC is a two-year long competition in which teams from universities across Canada compete to design, build, and test a 3U Cubesat to complete a mission designed by the students. WatSat's mission is to measure arctic sea ice extent and thickness using GNSS reflectometry, a method that uses reflected GPS signals to conduct remote sensing. The team is divided into six major subsystems: Attitude Determination and Control (ADCS), Command and Data Handling (CDH), Communication, Electrical Power Systems (EPS), Payload, and Structures. There is also a Business team that coordinates our finances and outreach events. WatSat is looking for new members interested in space and satellite technology as we begin the next CSDC competition in September 2016.

Waterloo Rocketry Team

ROBIN LIU
WATERLOO ROCKETRY TEAM,
ADMINISTRATIVE LEAD

This isn't your uncle's hobby rocketry. The Waterloo Rocketry Team builds sounding rockets that deliver 10 pounds of payload to altitudes of up to 23 000 feet. We are a gathering of passionate, talented, and hardworking students who can somehow figure out literal rocket science but struggle to agree on where to go for lunch.

With a size that surprises many, our rocket typically stands as tall as your average African Elephant. In helping to build this rocket, you can gain valuable hands-on experience, not to mention knowledge in one of the most demanding engineering fields.

The Intercollegiate Rocket Engineering Competition is the world's largest gathering of undergraduate rocketry teams, with representation from countries all over the world. Our team has won the prestigious award of "Best Explosion", a feat that we're very proud of. If you can't win, at least go out with a bang!

We're located in E5-1008, and you can visit www.waterloorocketry.com to learn more!

Midnight Sun

AARON LAM
PROJECT MANAGER

The Midnight Sun Solar Rayce Car Team is a student team which designs, manufactures, and races solar-electric cars capable of travelling on public highways. Our mission is to educate the public and promote innovation in sustainable energy technologies. Midnight Sun's membership spans from the undergraduate level all the way to university alumni and come from all of UW's six faculties. Our diverse team offers challenging work in the mechanical, electrical, and business disciplines, with project cycles spanning multiple years. The team competes in the American Solar Challenge and the World Solar Challenge. We welcome all students who share a passion for innovation!

University of Waterloo Alternative Fuels Team

RADHIKA KARTHA RAJAN
UWAFT PROJECT MANAGER

Working with UWAFT gives you the opportunity to work with a real Chevrolet Camaro to lower its emissions and make it fuel efficient while ensuring its safety and consumer acceptability. Our job is to integrate all the necessary components for the conversion of the conventional gasoline vehicle into a Plug-in Hybrid Electric Vehicle (PHEV). We take part in a competition called the EcoCAR 3. Students who have taken part in the competition are exposed to the latest engineering tools and software, and are made aware of the industry standards and practices. This is an amazing opportunity for anyone who is interested in more hands-on experience and wants to see a lot of the theory they learn in classes be put into use. The highlight is the fun we have while learning such high academic content.

Other Design Teams in the SDC

Aquaponics Team
Autonomous Sailboat Team
Baja Team
Bridges for Prosperity
Designed Nanoscale Assembly
Engineers for Hope
Formula Motorsports Team
International Genetically Engineered Machine
University of Waterloo Clean Snowmobile Team
UW Robotics Team
Waterloo Aerial Robotics Group
Waterloo Hybrid
Waterloo Submarine Racing Team
Waterloop

Writers, Copy Editors, and Layout Editors needed for

THE IRON WARRIOR

Want to get involved, but don't know what club to join? How about *The Iron Warrior*?
Join our friendly and dedicated team as we provide the engineering student body with the stories that are important to them and to you!
If you're curious, stop by one of our meetings (6:30 on Tuesdays in E2-2347) or email us (iwarrior@uwaterloo.ca)!

The History of Orientation Week at UWaterloo

ROSS RICUPERO
CIVIL '09

The oldest recorded discussion of Orientation Week at the University of Waterloo is from the October 13, 1961 edition of The Coryphaeus, the University of Waterloo's first student newspaper. It's a simple article that welcomes freshman engineers to the school and the Engineering Society. It also gives thanks to Dave Smith, chairman of the Initiation Committee (Orientation used to be called initiation) and announces the Initiation Dance as part of WA-WA-WEE '61 (The old name of Warrior Weekends, an event that ran up to 2011).

The September 27, 1963 edition of The Coryphaeus gives even more details on "initiation" with an article discussing the school-wide scavenger hunt (apparently they acquired things like wagons, tractors, hay bales, snow fences and pictures of someone named Brigitte Bardot), a game to measure the length of a city block with hotdogs, a challenge to make a line of pennies stretching from Kitchener City Hall to Waterloo City Hall (which is apparently approximately 140,000 pennies), the (seemingly) annual 'Froshman Hop' dance, and some unknown event called the 'Hootenanny'. Each faculty organized their own Initiation program and worked with the Orientation Committee, which ensured the individual programs worked across the school.

In '64, '65, and '66 even more traditions had started to form. First year students from Arts, Science, and Engineering (the only faculties at UW at the time) were all awarded 'beanies' or caps at the beginning of (the now called) Orientation and the cheer of "I'm a dirty rotten dead horse and I stink!" was used throughout the week, accompanied by students falling to the ground, laying on their back and sticking their arms and legs in the air. The Frosh Queen competition, in which 'Freshettes', or female first-year students, competed to be elected to the position complete with sash and crown, became a major event. The penny-drive also became Slave Day, where first-year students would be sold to members of the community to help them with whatever they choose, or for charity purposes.

In 1967, Stewart Saxe, a political science student and head of the Orientation Committee, re-imagined the entire week and introduced the big-brother concept. All first year students (there were only 2,200 in 1967, a third of the 6,000+ we expect this year) were divided into groups of ten which were overseen by Archons, a single upper-year student leader, which stayed with the group the entire week. This year continued the method of each society running their initiation programs, and the Orientation Committee overseeing the entire thing.

1967 was also the first year that an aerial photo from Orientation Week was published. The 360 strong group spelled "Hagey" across the Arts quad to salute then-president J. G. Hagey (the same Hagey that Hagey Hall is named after).

It was during the late 1960s that the bulk of Orientation Week was moved to the control of the Federation of Students (FEDS). While the student societies still planned and ran programming for their specific faculty, many of the larger events would be planned by FEDS. It's from this point throughout the 1970s that FEDS took the Orientation Week of the 1960s and made it into a month long Orientation program with varied social or educational events each day from the start of September to the end. This included many high-profile concerts such as Meatloaf, Gordon Lightfoot, and Ike and Tina Turner, as well as speeches from major political figures, cabinet ministers, MPPs, and radical leaders.

While the much expanded programming offered more choices for incoming students, it was during this time that student apathy and low attendance began to take its toll. Concerts lost money (the Ike and Tina Turner concert lost $6,000 in 1972, which is over $30,000 today accounting for inflation), speeches went unattended, and acts cancelled or simply didn't show. Reviews of the Orientation program varied wildly from condemnation to enthusiastic.

It was during this time that the Engineering Orientation program moved away from the Slave Day charity and began running the Bus Push charity (which has continued annually since then in the Winter term). 1969 also saw the Engineering Stag event of Orientation Week, which was little more than a drunken strip-tease for first-year students.

It wasn't until 1978, when the LLBO took dispute with the University's 'beer tents' that programming needed to be reduced and concerts rethought. The LLBO refused to license the outdoor tents that were part of Orientation Week in years past, reducing the amount of money that the Orientation program had to use, preventing headline concert acts and major guests.

Then began the dark years (or the years where written records become spotty). It's expected that Orientation Week continued this way for the 1980s and early 1990s. Student societies continued running programming for their faculties, and the Federation of Students continued running the overall program. It was during an unknown Orientation Week during the 1980s that the Education Committee was founded, and that the engineering hardhats became a major symbol. These have stayed as key components of Engineering Orientation Week since then. The oldest record of the Education Committee is an Orientation Week video from 1988 and hardhats could be over a decade older than that.

At the end of the dark years, Engineering

Orientation Week was a tight, multi-day program packed with events. Incoming students would go through a program similar to the program we have now, but that had very distinct differences. In 1993 a UW Orientation Manual was produced and distributed to the groups running the faculty programming and soon after a major part of Orientation Week today was founded; the Federation Orientation Committee (FOC). The goal with FOC was to have better collaboration between the independent groups running various Orientation Week programming and the Federation of Students, allowing a more efficient Orientation Week overall. This started the process of Orientation Week becoming more regulated and controlled, something that would take the unorganized month-long Orientation programs of the late '70s and '80s, to the smaller, week-long programs of the '90s. By 1996, a schedule that resembles the modern day Engineering Orientation Week began to emerge: Aerial photos were taken (these can all be seen in the POETS lounge), they earned their hardhats, and they all met the Dean. However, they also competed in chariot races, paraded through town, and had organized off-campus parties—events long since banned or modified.

It was during 1997 and 1998 that a new program started to address major concerns highlighted in an Orientation Student Survey conducted in 1994 and 1995. This survey concluded that there was a dangerous undercurrent of behavior across all Orientation programs. From discriminatory chanting to exclusive programming and a dependence on drinking, it was seen that there was a fundamental problem with Orientation Week; the leaders themselves. There was no formalized Orientation Leader training program for leaders to go through, and there were few checks and balances on the actions of these leaders too. People simply ran Orientation Week like it had been run for the year they went through it and every year before that.

It was because of this that the Provost's Advisory Committee on Orientation (PACO) was founded, and PACO training was implemented in 1998. This training, mandatory for all Orientation leaders, covered things like drinking and drugs, inclusivity, and non-discrimination. While some students cried out that this was gutting the Orientation Week they knew and loved, it ultimately led to the modern Orientation Week we have now, which many believe to be better than ever before.

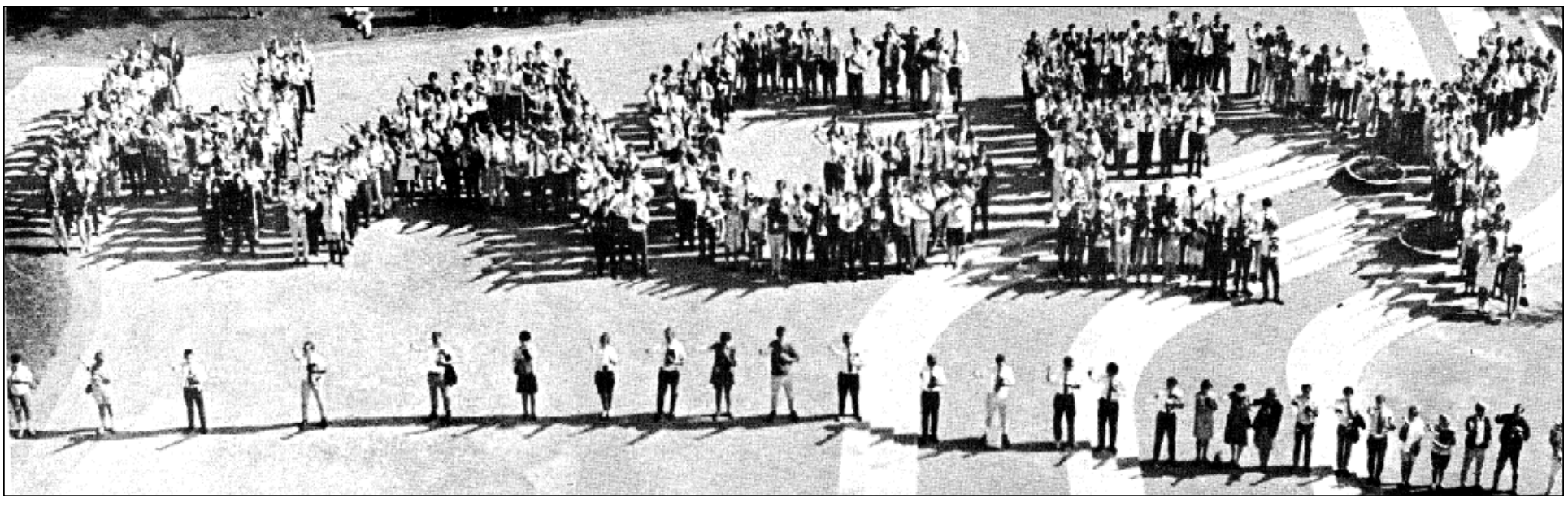
With the double cohort of 2003, a large percentage of students were now entering university at age 18; younger than the legal drinking age. This became a problem as many planned events during Orientation Week were 'wet' events where alcohol was served. A controlled environment was implemented, with 'beer gardens' allowed at certain events and each organizing group allowed to have a single 'wet' event for their faculty or residence.

By 2004, PACO was dissolved and we were left with Orientation Leader Training, the modern version of PACO leader training. 2004 was also the last year that Orientation Week officially included alcohol with a beer garden at the Saturday night Toga party. Once Orientation Week 2004 closed, alcohol wouldn't be part of the week again.

In 2016, Orientation Week is over 50 years old, involves over 8,000 first-year students, 1,000 upper year students, has a budget in the hundreds of thousands, and the support of countless sponsors and contributors. While it may be completely different from the Initiation of 1961, Orientation Week 2016 has built upon the past decades; all of the conflicts and problems, changes, successes, and failures have been rolled into the week.

While it may not be perfect, it is a continuation of a tradition started soon after the University of Waterloo was founded, and it represents the unconventional history and future of this school.

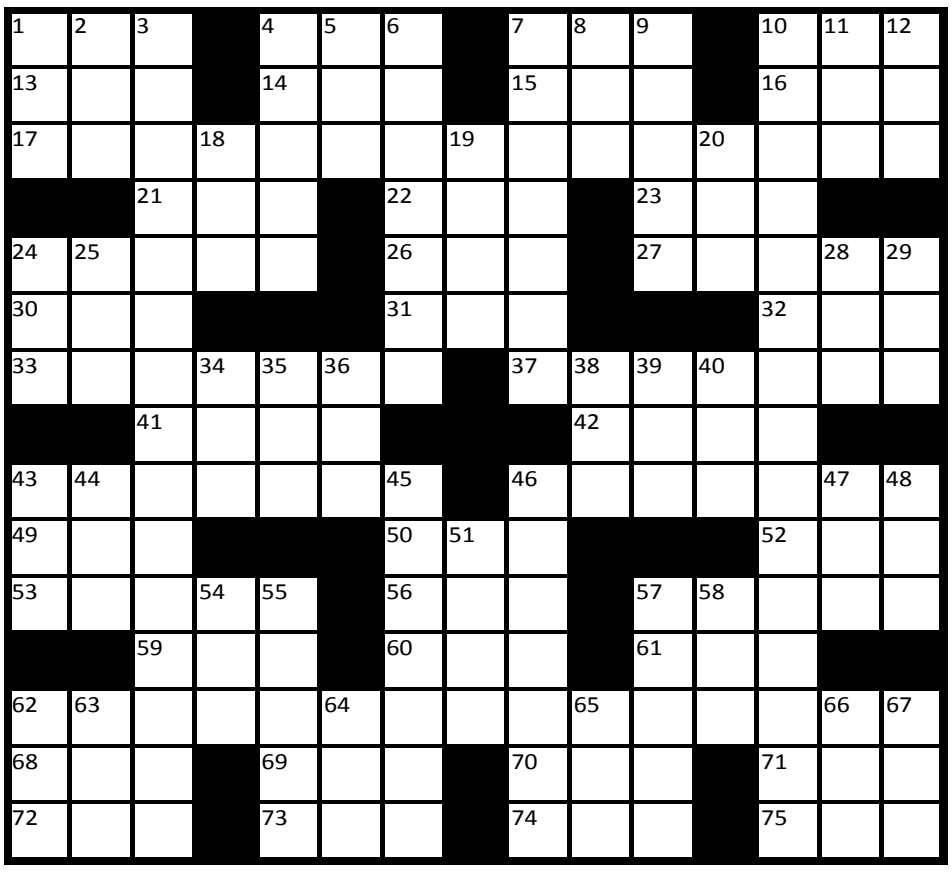
(Editor's note: Some minor modifications made to the original article by Ross to keep the article current.)



The Iron Crossword

War of the Worlds

CAMERON SOLTYS
3B MECHANICAL



ACROSS
1: Santa's servant
4: Anti-virus software of Grisoft
7: ___ cake, special cake sold during prohibition
10: "A long time ago, in a galaxy ___ ___ away"
13: Land of PB, LSP, and the Ice King
14: Hot drink made with plant leaves
15: Rock with a high mineral concentration
16: "___ to a Small Lump of Green Putty"
17: Rules that are applied unfairly to different groups
21: Scandinavian Wool Rug
22: Very efficient light source
23: Gang led by Lung in web serial "Worm"
24: Walks back and forth
26: Expression of concern or confusion
27: Green brother of Mario
30: Expression of amusement or surprise
31: Online Q&A with a person of interest
32: French plural definite article
33: Tool designed to chip at ice
37: Military, Christmas, or Thanksgiving, perhaps
41: Most massive dwarf planet in the solar system
42: Female equivalent of "Lord"
43: Poison often found in rice
46: Pizza chain named after a game
49: Anagram of "NEO"
50: We ___ the engineers
52: Pyrexia of unknown origin (abbr)
53: Temporary failure of concentration
56: Pacific or Atlantic
57: Genus of house cats
59: A more-hoppy beer (abbr)
60: Sloth from "Ice Age"
61: Female reproductive cell
62: Offers reimbursement for losses to earthquakes, fires, and storm
68: Area between North and South Korea, for example (abbr)
69: Pale brown colour
70: Latin for "and other things"
71: Money used in France and Germany (abbr)
72: Dead or Alive (abbr)
73: Control panel used by production personnel
74: An ___ up my sleeve
75: US agency for security at airports

DOWN
1: Bomb Squad (abbr)
2: Water! Water! Water!
3: Super-pizza
4: Book containing many maps
5: Nickname of Yvonne Parker on Orange is the New Black
6: Occurs when a pipe carrying gasses fails
7: Map used to navigate a city or country
8: Contains human ashes, perhaps
9: Gold, silver, or bronze
10: 1956 sci-fi film that takes place entirely away from Earth
11: Opposite of subtract
12: Place to stay on campus, particularly in first year
18: So ___ ___, Miss American Pie
19: Coop or academic
20: Monkey-partner of Aladdin
24: Ancient Greek equivalent of "F"
25: Asean Economic Community (abbr)
28: Golly ___
29: $100 billion spacecraft
34: Prefix meaning before
35: Institute for Integrative Nutrition (abbr)
36: ___: Miami or New York
38: Excitement or hubbub
39: Hit very hard
40: ___ McKay, author of "The Virgin Cure"
43: Early ISP that now owns "The Huffington Post"
44: Single-stranded biological information
45: Spacecraft orbiting Saturn
46: Very-salty water in the Middle East
47: French for "Yes"
48: Cry for help, over a radio
51: A strap used to control a horse
54: A place where spring water is used for baths
55: Third planet from the sun
57: Causes acceleration
58: When an astronaut exits a spacecraft
62: Hard Drive
63: Association for Ontario Cities
64: Used to hold back water
65: Standard used to keep clocks the same (abbr)
66: B/C (alternate abbr)
67: Period of time

Sudoku

#2016-FR

CAMERON SOLTYS
3B MECHANICAL

Easy

	1		9	4	2	3		
		9				2		
	8			5				
1		2			8	7		
5	6						2	3
		4	2			6		8
				3			6	
		7				8		
		3	5	1	6		7	

Medium

		3			2	4		
9	2			7				
1			4	3	9			
7					5	2		
4			3	9	7			5
		1	6					7
			9	8	4			1
				6			7	4
		9	7			6		

Hard

	8		2		9	3		7
		5				8	2	
							4	5
	9		6	1				
5		2		7		1		3
				3	2		9	
4	5							
	6	1				2		
8		3	1		4		5	

Solutions for previous crosswords can be found on *The Iron Warrior*'s website at *iwarrior.uwaterloo.ca/distractions*.

THE IRON INQUISITION

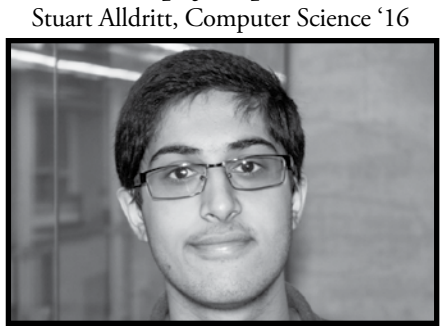
Cameron Soltys, 2T Mechanical

"What Was Your Favourite Part of Orientation Week?"

"Variety night—there was a manhunt game, and not only was it fun but it taught me the map of campus."
Stuart Alldritt, Computer Science '16

"Junkyard Wars!"
Hannah Yu, 2T Civil

"How about when we received the hardhats? I thought that was awesome. It's still up on my wall."
Joseph Perez, 3N Mechanical



"Monte Carlo"
Shalin Upadhyay, 2B Computer Science

"Monte Carlo[...] You would know a decent amount of friends and it was a good place to hang out."
David Stephens, 4B Physics and Astronomy

"Junkyard Wars"
Archie Lee, 2B Mechatronics

WARRIORS, YOUR STARTUP STARTS HERE

36

You are innovative, entrepreneurial, and excited to create new technologies.
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Co-Founder, Thalmic Labs
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