



School of Engineering Science and ESSS Semesterly Meeting - FA22

Meeting Date:

October 21st, 2022

In Attendance (In-Person):

Dr. Michael Sjoerdsma - Director, School of Engineering Science

Boris Perdija - ESSS President

Colton Koop - ESSS VP Academic

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Opening Statement

The Engineering Science Student Society and the Department of Engineering Science are working hard to accommodate all ENSC students to the best of their ability. We have been in contact with each other these past few weeks to make sure everyone is continually supported akin to times before the pandemic. I would like to thank everyone who sent in their feedback as it provides us with the opportunity to work towards solutions.

Brief Note

- All decisions were made while considering academic integrity, feasibility, and student feedback.
- Anything not mentioned here is still being considered within the department and faculty.

Rules for Graduating on a Co-op Term

Can students graduate on the third co-op term? What are the rules for graduating on a fourth+ co-op term?

The ability to graduate on a co-op term or the chances of being provided leniency to do so have been murky to many students in the Engineering Science body. In the previous semester's meeting with the ENSC director, it was declared that **graduating on a co-op semester is formally unallowed** through policies dictated by the co-op office. Dr. Sjoerdsma has further affirmed this fact at this meeting. Additionally, the ENSC director has made it known that **co-op has its own accreditation body** and, because of this, **FAS would have little say in providing students leniency** if they decide to attempt to graduate on a co-op term.

With all that said, the future prospects of allowing this remain uncertain and FAS is in favor of co-op loosening these requirements in the future. For now, the ESSS recommends that students avoid finishing on a co-op term if at all possible and speak with their co-op coordinator as early as they can if they anticipate being in this situation.

ENSC 351 and Staff Shortages:

Can you provide more insight on the situation that caused problems with ENSC 351? What is the department doing to fix this situation in the short term and the long term? To add to this, there is a perceived staff shortage, especially as courses are mostly only offered once a year.

The faculty of applied sciences is aware of certain professors recently entering a multi-year leave of absence, some of which have been unexpected. This has created strain on the department to find willing and capable professors that can teach all of the department's required courses. To add to the already difficult situation, **FAS is not permitted to hire new faculty to replace a leave-of-absence position** until they know they are not returning, which can force new positions to be designated as sessional.

With regards to ENSC 351, professors and instructors were reached out to directly to teach this class, however, because many could only teach a certain number of courses by contract, they could not add on additional courses. **Proper procedures were followed to find a professor for this class, but the department found it extremely difficult to get this now-sessional job filled.** FAS has attributed this to a less competitive wage (when compared to non-sessional instructors) and the requirement for a Professional Engineering (P. Eng.) designation. To make it easier to fill the position, FAS had removed the P. Eng. requirement, which the current ENSC 351 professor does not have. Dr. Sjoerdsma iterated that the Professional Engineering requirement will not impact students with their AU's.

The department has noted how difficult it is to find willing sessional instructors for upper-division courses, and they have made a note to avoid this if at all possible in the future. There was no further comment on the future of additional staff.

Status of ENSC 450 and 452

What is the status of ENSC 450 and 452 for next semester? Will both be offered?

As of October 21st, Leslie was originally scheduled for both classes but is now slated to teach only ENSC 452. Dr. Sjoerdsma had mentioned that he would speak with the person handling course scheduling and hopes to give students enough lead time if there are any issues. As of November 22nd, a seasonal instructor is listed to be teaching ENSC 450.

Can CMPT XXX Count as an ESD?

Will the new CMPT 403 count as an ESD Elective for Computer Engineering?

The process of adding additional ESD electives for the various concentrations has proven to be an arduous process due to various accreditation requirements. Specifically, the Canadian Engineering Accreditation Board (CEAB) dictates the minimum requirements that need to be met in order for SFU's engineering program to remain accredited. Presently, the courses we take in our program are placed in various determined Academic Unit (AU) categories, and all AU categories must be fulfilled in order to graduate in engineering. Additionally, CEAB dictates that a certain number of courses need to be taught by a P. Eng. Due to these constraints, the pool of approved ESD electives for each concentration becomes limited, and some concentrations end up being more harshly punished than others. Computer Engineering in particular has been designed to have access to a large number of ESD electives, and other options may simply not be meeting their AU requirements to allow them to take more electives.

With regards to additional CMPT ESDs, it is difficult for new courses to be approved due to the fact that they are not taught by professional engineers.

Michael Sjoerdsma requests that students email him if new CMPT courses come to exist, which may possibly be added to the list of approved ESDs. Additionally, if you had any that interested you in particular, you can also get in touch with Colton Koop at academic@esss.ca where this will ideally be brought up either to the computer engineering option head, or at the next UCC meeting.

ENSC Website Thesis Clarifications

When will the website with resources for students writing their thesis be updated?

FAS has currently found itself in a situation where certain key staff positions that would focus on updating these web pages have not been filled. **Dr. Sjoerdsma states that this is definitely being looked into and will hopefully be updated soon.**

Learning CAD in ENSC?

Students are seemingly expected to know how to use CAD for ENSC 386, however, we are never taught how to use CAD. As CAD is a very important and in-demand skill, why are we not taught to use this? Can we please add CAD-related courses to our core curriculum?

Dr. Sjoerdsma strongly agrees with this sentiment and is interested to see if ENSC 204 could be turned into a 3 credit class to allow students an opportunity to learn additional practical skills. With this change, he also noted that he would like to see students learning machine shop and 3D printing principles, among others.

Unfortunately, this drastic change would take a long time to plan and approve, and Dr. Sjoerdsma makes it known that students should not expect any major changes until the next accreditation.

That said, **FAS is interested in planning what a new curriculum could look like**, but is also **considering the fact that students are already burdened with taking enough credits** as the degree is currently laid out. Removing some content from a currently existing class may be the only way additional content can be added to ENSC 204.

Minimum required units/term Policy

Is the department considering a return to a minimum required units/term or will we have no restrictions on our pace through the program for the foreseeable future?

As some of the more ~~new~~ seasoned students are aware, there was once a policy that required students to take a minimum average of 10 units per semester. This policy has since been dropped entirely. **As it stands, there is no credit per semester limit** essentially giving students the freedom to take as few courses per semester as they wish.

Dr. Sjoerdsma states that as long as he is director, if there are any new policy requirements created, there would be reasonable lead time and these new policies would not consider previous semesters. **With a new ENSC director expected to come in soon, this policy could potentially be looked into again.**

Update on Planned Course Offerings

In the last meeting, it was stated that there were long-term course projections coming soon, but we haven't seen this yet. Are there any updates?

In the Summer 2022 report, the engineering department was noted to be working on a two-year plan for students in engineering which was slated to be finalized by the end of the summer semester.

Dr. Sjoerdsma has stated that the faculty of applied sciences still have these plans, as well as a draft 2-year plan, but that he will follow up on this.

Unsatisfactory Courses/Teaching

What is the department doing to address underperforming professors or poorly delivered courses? What actions can a student take to report a situation they're unhappy with?

The Faculty of Applied Sciences typically holds bi-annual reviews to ensure professors and instructors are still capable of teaching classes at SFU. **Students are suggested to fill in their student experience surveys** to provide feedback, especially since the response rates are generally extremely low.

Because of these low numbers, it's noted that reviewers may dismiss these responses for fear of them being a biased sample. A higher response rate would be more representative of a typical students feeling's regarding a professor or course.

Beyond feedback surveys, **students should go directly to Colton - the ESSS's VP Academic - with any concerns or complaints they might have.** This information does get brought up directly to Dr. Sjoerdsma and has previously been extremely helpful for not only the department, but students as well.

One thing that the ENSC director notes is that it typically takes multiple reviews for things to become disciplinary, and new lecturers may simply not know the culture of the school for the faculty to take immediate serious action. As with most people, professors generally do seek to improve, but the feedback needs to get passed along and time has to be given for them to make changes.

6 Classes a Semester Expectation

This program shouldn't be advertised as a four-year program; it's possible if you take six classes a semester but for most students that is unrealistic. Either classes should be offered year-round or it should be labeled as a 5-6 year program

As it stands, SFU labels the engineering program as a four-year degree largely due to the fact that other schools do this as well. Higher-ups within the school recognize that **this marketing is not necessarily wrong**, and that **labeling SFU Engineering as a 5 - 6 year program could potentially decrease enrollment numbers.**

Additional Seating in CMPT Courses

What is the progress of adding more guaranteed seats for ENSC students in CMPT classes?

FAS has been in close contact with CMPT and **additional seating has been added for select CMPT Classes.** Namely,

- CMPT 225 seating for engineers has increased from 15 to 30
- CMPT 276 seating for engineers has increased from 18 to 30
- CMPT 300 seating for engineers has increased from 15 to 50

Pro-tip from the ESSS President: [apply for a CMPT minor](#) to get priority seating in all CMPT classes.

Status of New ENSC Director

What is the status of the hiring process for a new director?

An ENSC Director Search committee has put forward a preferred candidate after going through numerous applications and interviews. A faculty meeting was held to learn about this candidate, and a ratification vote was meant to be held shortly after October 21, 2022. Assuming all has gone through without serious debate, once the dean has received this vote, they will contact this candidate and discuss their terms of employment. **Dr. Sjoerdsma feels that it is unlikely they will begin their position before May 2023.**

CEAB Review Concerns

Since CEAB review is coming up soon, what are some concerns?

Dr. Sjoerdsma has stated that there are no real concerns with the upcoming CEAB review. The visit generally takes a lot of preparation, and FAS intends to use the visit to lobby for an increased faculty-to-student ratio. Additional faculty within ENSC would help alleviate a lot of major stresses within the department, and this would be a good time to push for hiring.

Moreover, any structural or safety issues have since been addressed, so that is not expected to be an issue.

This visit is expected to occur in late fall or early January.

ENSC Director Initiatives

What initiatives is the ENSC director currently working on that will be of interest to students?

The ENSC director states that he is currently making further renovation decisions (though he notes that this is probably “not of interest” for students). Beyond this, Dr. Sjoerdsma has iterated that he is fully focused on the incoming CEAB review. Other things to note include the possibility of the biomedical engineering major becoming a non-honors option, finding ways to improve the student-TA experience, and the co-op office considering to redefine what co-op is defined as.

Dr. Sjoerdsma states that he is not making any drastic changes as a new director is expected to be taking over shortly.

Engineering Common Room Status

When are we getting a new undergraduate common room?

The **engineering undergraduate common room has officially moved to ASB8842** and requires a fob to access. **The code for the door is 35142.** The ESSS is currently planning the process of upgrading it, with changes likely to start being made over the spring semester. Renovations are expected to include things such as new paint, new furniture, new decorations, a new kitchen setup, and a new door code. Best of all, it'll be asbestos free™*.

As we are currently getting it set up for future use, the space is currently limited to being a place where students can sit and microwave their food.

If you have any suggestions, requests, or questions, please email commonroom@esss.ca or admin@esss.ca.

* President note: I hope.

Burnaby-Based Design Team Spaces

Is there any chance that we can get a space for established Burnaby-based design clubs to build and store their projects?

Design teams based in Burnaby have made it known that they don't have design spaces on their home campus, which has made it far more difficult for them to work on their extra-curricular projects. This is a struggle that Surrey-based design teams don't face, due to the fact that they have much more spaces available per student than the Burnaby campus has.

Dr. Sjoerdsma notes that he is not currently fully aware of what the Maker Space will look like, but he does state that it is a sizeable space. There is potential for bookable spaces to be close to that room - but beyond that, **it's not certain or likely that there will be additional free space that can be dedicated to design teams on our campus.**

ASB Renovations Status

What is the status of renovations? When will they be completed? What new and exciting spaces can the ENSC student body expect?

ASB renovations are noted to be nearing completion, and SFU / FAS are currently finding and trying to rectify any deficiencies that they come across. New spaces are noted to be much better designed than they used to be, with old hallways and useless spaces being effectively used up. **Teaching labs are expected to be fully completed in early spring, and the Maker Lab by mid-spring.**

There is unfortunately no word of the missing spider statue that once existed.

3D Printers in ASB

When are we getting 3D printers in the ASB?

Dr. Sjoerdsma states that these should be ordered, and he is **hoping that they are set up for the spring semester**. The current priority has been put on getting the teaching labs ready as soon as possible. Additionally, students should note that the 3D printers fall under the dean's jurisdiction, and not the ENSC Directors.

Closing Remarks:

As a closing note, I would like to thank you for making it this far and reading this report. The Engineering Science Student Society truly appreciates all of the submissions made by our students and we are happy to have been able to bring them up with the acting director. Your voice can make a difference in the faculty and we appreciate your efforts to make our department as great as it can be.

If there are any further concerns you have that were not discussed in this report or you would like further details on a section, please do not hesitate to contact me at president@esss.ca. Additionally, if this report did not address your specific concern, and your concern is time-sensitive, I encourage you to reach out to Dr. Sjeordsma directly and he will assist you with your specific case.

Please be aware that the next meeting with the director will occur next semester and I will be releasing another survey for students to submit their concerns in January.

Once again, thank you all for your submissions and for reading this report. The ESSS is proud to represent you in all aspects of the Engineering Science Program. We wish you the best for the rest of your semester.

Sincerely,
Boris Perdija