

SE101: 2018-09-13

How Things Work

How UW Works, 2017–18

Income:

- \$425M tuition
- \$232M grants
- \$716M total

Expenses:

- \$511M salaries (thanks!)
- \$53M student support

Province funds universities
(which are nonprofit).

Grants have dropped since 1995.
Tuition has gone up.

How SE Works: $SE = CS + ECE$

- Computer Science
- Math Faculty
- Largest CS Dept in Canada + largest faculty
- Elec & Comp. Engineering
- Engineering Faculty
- Largest ECE Dept in Canada + largest faculty

Every prof works for either CS or ECE.
SE is a collaboration.

Facts about SE

Small vs CS, ECE:

- Class of 2023: 125 students
- on-stream: 351 students
- off-stream: 217 students

ECE 1A = 372; CS 1A = 185*

* many CS students join later

SE Graduation Rates

Typical class size at graduation: 80-100.

- class of 2018 = 144

Total BSE degrees granted = 1123.

Graduation rates:

- BSE 65-81%
- BSE/BCS 71-85%
- B.any 75-85%

How Term Promotion Works

SE follows Engineering rules:

- need term average $\geq 59.5\%$
- to pass a course, need mark $\geq 50\%$

Failure rates (must repeat a term):

- first year 7-14%,
- second year 5-7%
- upper years ~ 0

About 25% of graduating students have failed a course.

How SE Students Work Post-Grad

Class of 2018:

- 88% full-time tech, 4% full-time non-tech, 3% grad school
- 4% Waterloo, 11% Ontario ex-KW, 3% Canada ex-Ontario
- 80% USA
- Starting base salary: US = C\$150k, Canada = C\$94k

Other SE18 Thoughts

On-campus SE program met my expectations:

$D = 3, d = 6, n = 9, a = 56, A = 22$

Co-op SE program met my expectations:

$D = 0, d = 1, n = 2, a = 12, A = 81$

Would recommend my program to prospective students:

$D = 1, d = 2, n = 8, a = 35, A = 50$

Plan to work towards PEng?

yes 16%, no 84%

How Bodies Work

1. Sleep
2. Eat
3. Exercise

How Emails Work

From: `you@edu.uwaterloo.ca`

Subject: [ECE 105] Squirrel mechanics question

Dear `Prof. X`,

I am a student in the SE section of your ECE 105 class. I would like to make an appointment to ask questions about squirrel mechanics. I am available on Wednesdays at 11:30 and Mondays at 2:30; if either of those times do not work for you, you can find my schedule here:

`https://uwaterloo.ca/software-engineering/sites/ca.software-engineering/files/uploads/files/1aschedule_0.pdf`

Thank you,

Y (ID xxx)

How Titles Work

Safe default = Prof. X.

Many instructors have PhDs,
so Dr. X usually OK.

Not OK: Mr. X, Mrs. X.

(You can call me Patrick.)

How Office Hours Work

Office Hours = time specifically set aside
for student questions.

Pro tip: Use them!

How Asking for Help Works

Resources for you:

- instructors
- TAs
- program administration (me, Derek, Shaz)
- Student Success Office
- AccessAbility

How Not Plagiarizing Works

You can look,
but don't write anything while looking.

How Universities Work: Who's Who

- Students
 - Undergraduate (you)
 - Graduate (MAsc/MMath, PhD)
- Teaching Assistants (TAs)
- Professors
- Medical Staff
 - Doctors
 - Counsellors
- Admin Staff
 - Registrar, etc
- Plant Operations Staff
 - Keep the lights on.

What do Professors do?

- Teaching
 - Undergraduate
 - Graduate
- Research
 - With grad students
- Internal Service
 - SE Director
 - SE Associate Director
- External Service
 - Peer review articles
 - Organize conferences

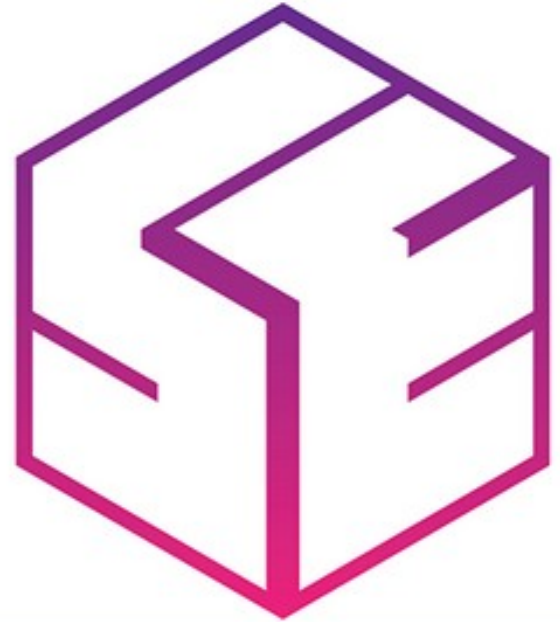
SE Society (SE Soc)

Organizes events for SE students:

- student-led résumé critiques
- mixers (today! 6-9! E5-3101!)
- “What I wish I knew in 1B”

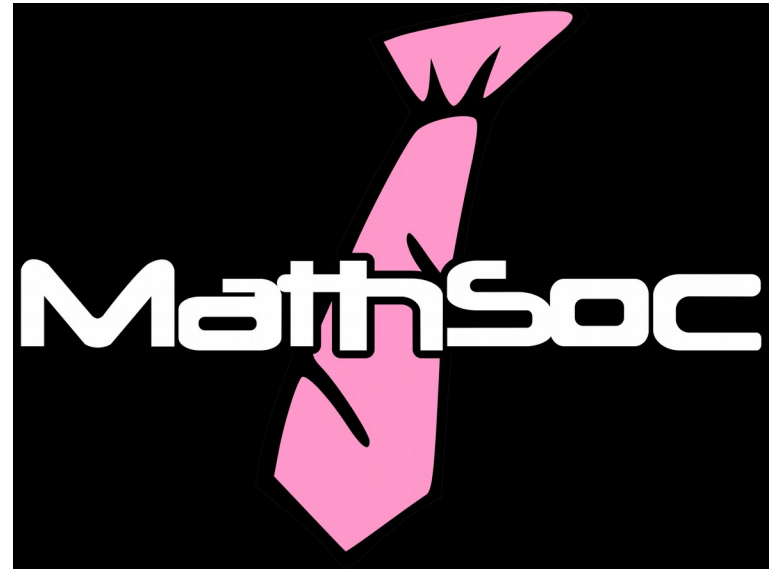
Helps with class swag orders;

Develops SE student life in general.



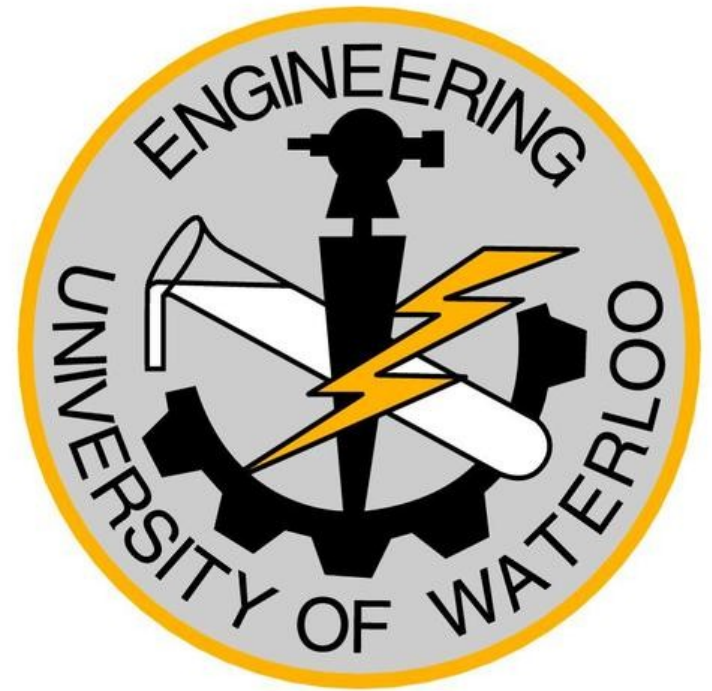
Math Student Society (MathSoc)

- Social events
- Board game rentals
- T-shirts etc.
- C&D (Coffee & Donut shop)
- Lounge (Comfy)
- Exam Bank
- Endowment Fund (MEF)



Engineering Society (EngSoc)

- Social events
- Board game rentals
- T-shirts etc.
- C&D (Coffee & Donut shop)
- Lounge (POETS)
- Exam Bank
- Endowment Fund (WEEF)



Feds

- UW Federation of Students
- Social events
- Intramural sports
- Clubs (> 200)
- Orientation week
- Student representation to
 - UW Administration
 - Government

