## 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

\* 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 >= 59.5%
- to pass a course, need mark >= 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:

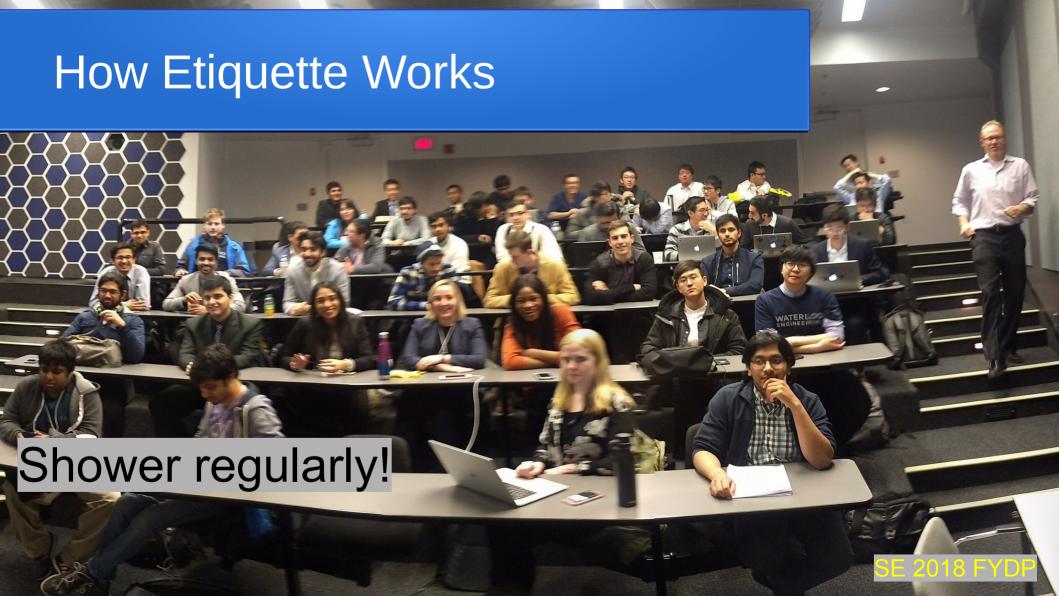
$$D = 1$$
,  $d = 2$ ,  $n = 8$ ,  $a = 35$ ,  $A = 50$ 

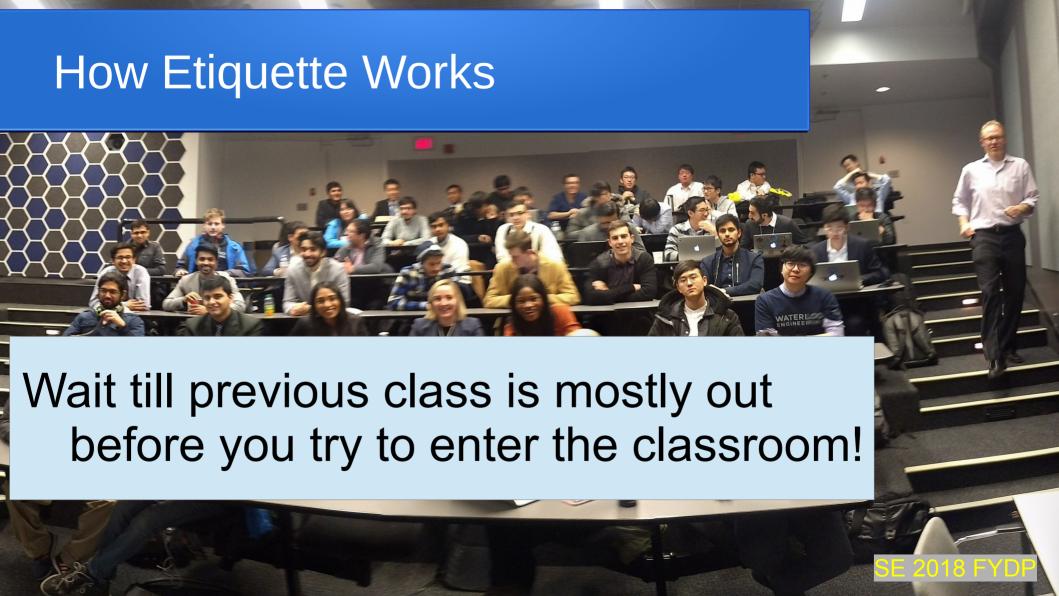
Plan to work towards PEng?

yes 16%, no 84%

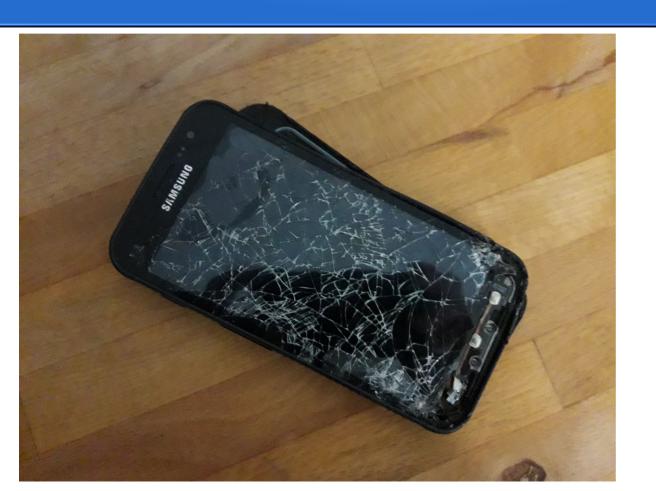
## **How Bodies Work**

- 1. Sleep
- 2. Eat
- 3. Exercise





# How Etiquette Works



Phones on silent!

Rottweiler/phone encounter image by Gus Alexandropoulos

# How Etiquette Works



Walk right, stand left?

... just don't stand in the middle of hallways!

image CC-BY 2.0 John Pasden via flickr

### How Emails Work

```
From: you@edu.uwaterloo.ca
```

Subject: [ECE 105] Squirrel mechanics question

Dear <a href="Prof. X">Prof. X</a>,

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.

(You can call me Patrick.)

Not OK: Mr. X, Mrs. X.

## **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
- External Service
  - Peer review articles
  - Organize conferences

- Internal Service
  - SE Director
  - SE Associate Director
- Research
  - With grad students

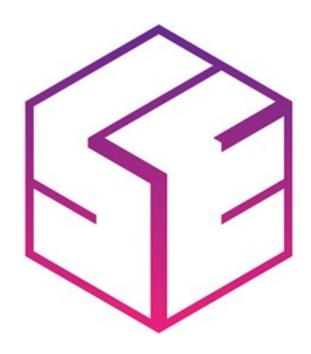
# SE Society (SE Soc)

#### Organizes events for SE students:

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

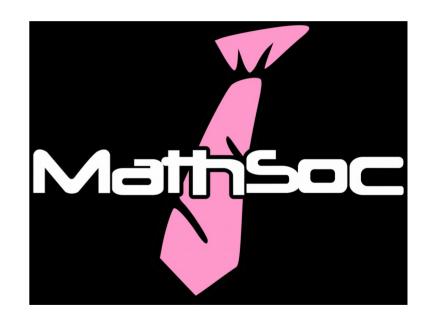
Helps with class swag orders;

Develops SE student life in general.



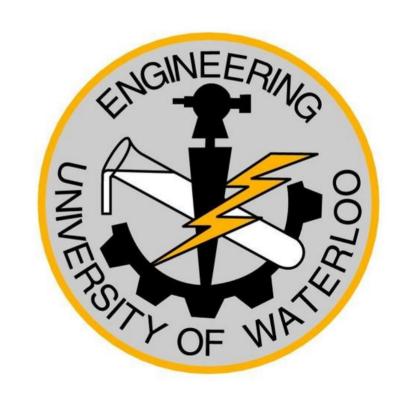
# Math Student Society (MathSoc)

- 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

