

Welcome to ECE!

Academic Orientation 2023





The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering
UNIVERSITY OF TORONTO

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.



The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering
UNIVERSITY OF TORONTO

We understand access to be a shared responsibility between everyone in this space.

We will strive to create an accessible space that reduces the need for you to disclose a disability or impairment for the purposes of gaining an accommodation. In doing this together, we strive to welcome disability, and the changes it brings, into our space.

- Is there anything about the space that we should address now?
- Are there any other access needs that might affect your participation in the orientation that we could also address?

Please reach out to Jess MacInnis



The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering
UNIVERSITY OF TORONTO

Welcome from the ECE Chair and ECE Undergraduate Office

Deepa Kundur
Professor & Chair

Professor **Deepa Kundur**



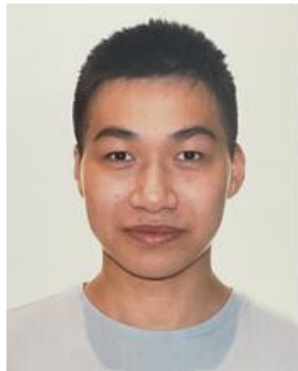
- **ECE Chair**
 - Professor who is the CEO of the Department and reports to the Dean
 - Deals with policy, curriculum, hiring professors, disputes and finances
- **Triple Alumna**
 - BASc 9T3 (ElecE)
 - MASc 9T5 (ECE)
 - PhD 9T9 (ECE)







Kundur Research Group



The Strength of **ECE** is in Our **People**



Professor Antonio Liscidini
Associate Chair- Undergraduate



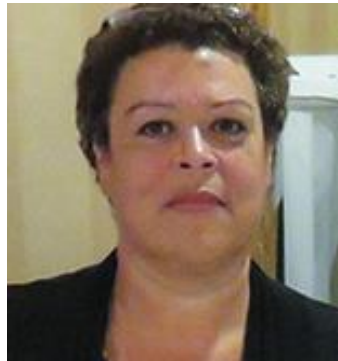
Leanne Dawkins
Program Manager & Advisor



Meera Puvitharan
Undergraduate Administrative
Coordinator



Mary Miceli
Information Services Assistant



Karen Irving
Student Advisor



Leslie Grife
Director, First Year Office & Advisor

(First-Year Office)



The Strength of **ECE** is in Our **People**



Excellence Innovation Diversity Scale

$$SS = \sqrt{PR \times SR}$$

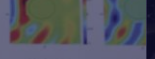
$$I_{\text{int}} = \frac{R_1}{R_2} \frac{d \sin \theta_1}{d \sin \theta_2} = \left(\frac{R_1}{R_2} \right) \left(\frac{\sin \theta_1}{\sin \theta_2} \right)$$

$$\theta_1 = 10^\circ \quad \theta_2 = 0^\circ$$

$$R \times 9$$

Cloaking

Measured Results



Unclad

Clad

What is special about ECE at U of T?

- One of the world's most livable cities
- Considered the best economy for young people
- Considered the world's most diverse city, 140 languages spoken

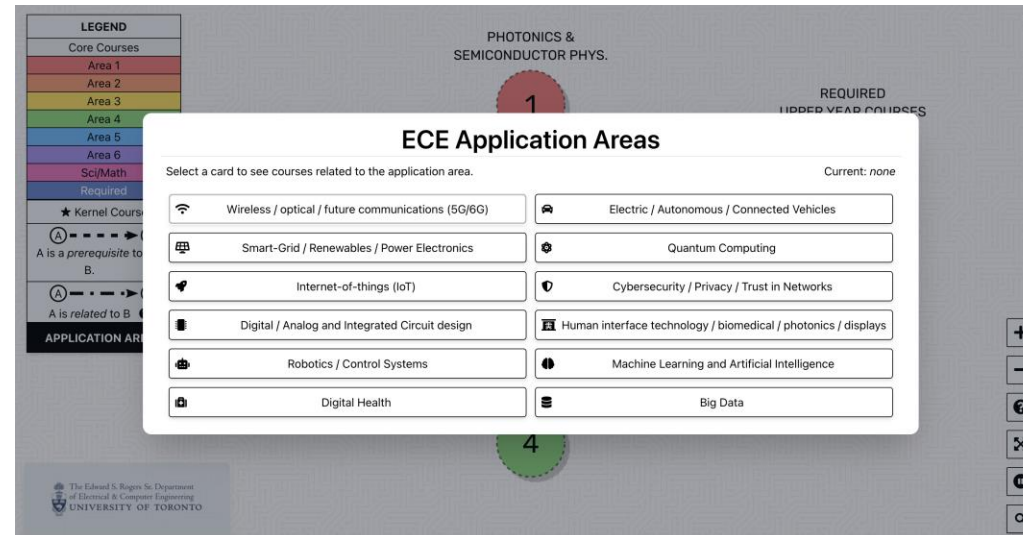


What is special about ECE at U of T?

- Leading hub for business, finance and culture.
- 3rd largest tech hub in North America
- One of the top destinations in the world to build a startup.

What is Special about ECE at U of T?

- Flexible curriculum: use it to explore both ElecE and CompE
- Check out [ECE Iris](#) and map out your interests to see which courses may be for you





Common Tips to Help You Succeed

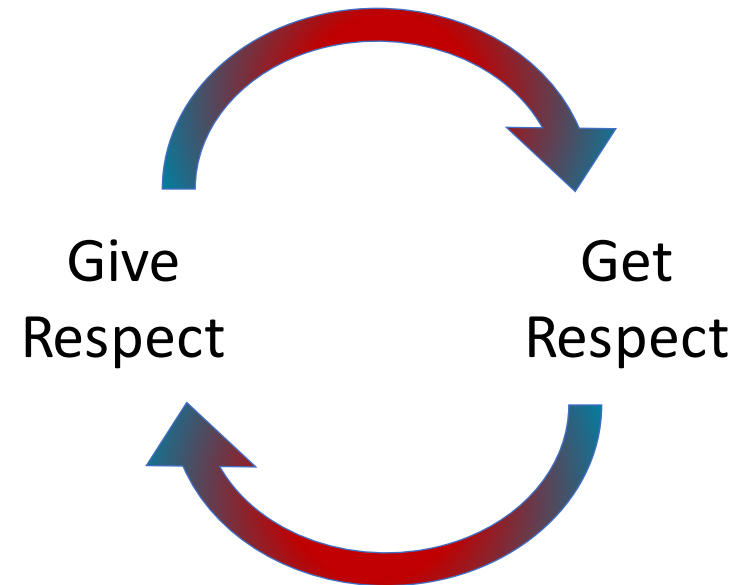
- Read your UTOEmail messages!
- Make backups of your computer!
- Manage your time!
- Work with people, but don't copy!
- Focus on learning, don't obsess about marks!
- Ask for help!
- Have a balanced life!

Prof. Deepa's DOs and DON'Ts

DOs

Treat people with respect

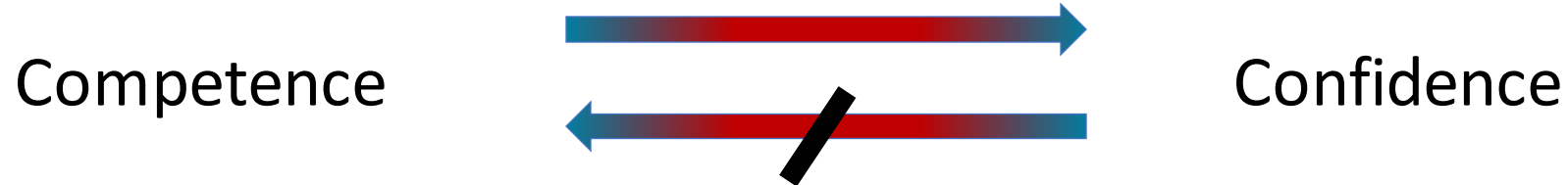
- Refer to your professors as “**Professor** [LastName]”
- Be polite to staff members
- Respect people’s time, space and values
- Respect **yourself**



DOs

Focus on Competence NOT Confidence

- Competence can **protect** you from getting voted off the island, but confidence will not.



DOs

Value Your Mistakes

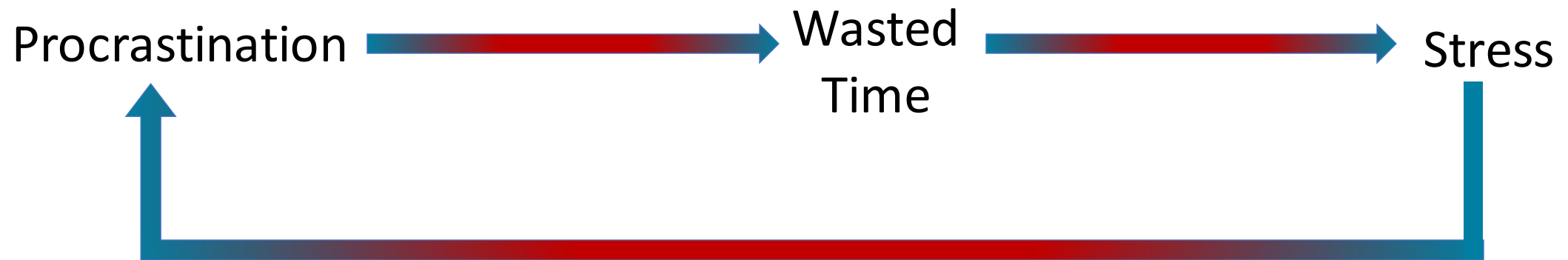
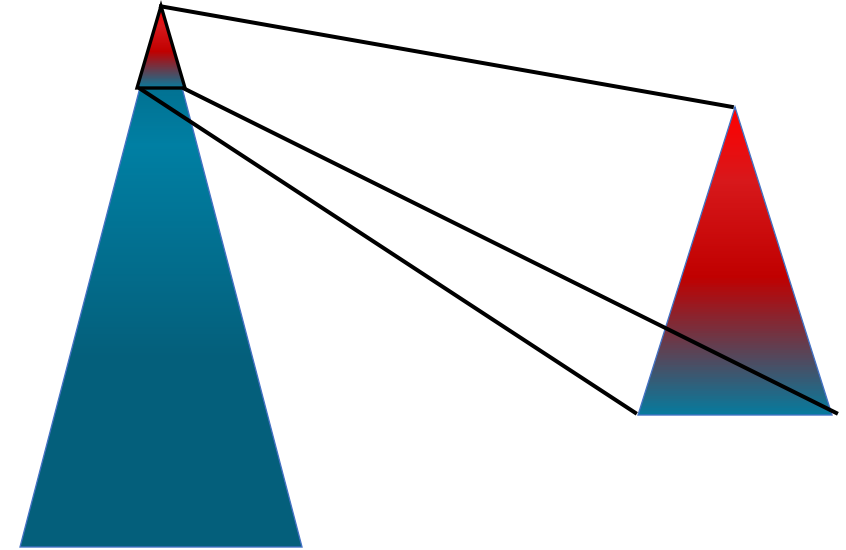
One of the best things ever said:

“Good judgement comes from experience and experience comes from bad judgement.”

- Learning happens through failure
- Overcoming obstacles leads to resilience
- Take risks

DOs

Manage Your Time



DON'Ts

Don't Take Things Personally

- What happens academically or professionally is often not personal
- Taking things personally leads to “drama” and stress
- Understand that what someone does is because of **them**, not **you**

DON'Ts

Don't Give Up

- Don't give up on yourself; if you give up, you will surely fail!
- Pick yourself up and try to see things differently
- Quick starts vs. Late bloomers — both good



“It ain’t over till it’s over.”

-- Yogi Berra

DON'Ts

Don't Worry about Conflict

- Conflict is **natural**; conflict is healthy
- Avoid dysfunctional conflict/situations/people
- Choose your battles
- “politics”/”backstabbing” occurs when at least one party is **fearful**



DON'Ts

Don't Be Fearful

- 6 **cancers**
(by Stephen R. Covey):
 - Cynicism
 - Criticism
 - Comparing
 - Competing
 - Complaining
 - Contending
- How do I overcome fear? **COMMUNITY**



“Fear is the path to the dark side. Fear leads to anger. Anger leads to hate. Hate leads to suffering.”

-- Yoda, Star Wars

Are you passionate about ECE, Engineering and U of T?

BECOME AN ECE AMBASSADOR!

- Share your enthusiasm with prospective students
- Gain professional experience and training
- Meet ECE professors, Chair and upper year students

Apply: uoft.me/ece-ambassadors



The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering
UNIVERSITY OF TORONTO



IEEE U of T Student Branch

Dalia Mahidashti, ECE Year 3 and
Leo Li, ECE Year 3



IEEE

University of Toronto
Student Branch



September 6, 2023

About us

Leo HC Li
Branch Co-Chair



Dalia V Mahidashti
Branch Co-Chair

Citation?



Example of IEEE Citation:

Website

[1] J. Watts, "Dreamcast Heads for Defeat in Console Wars," *theguardian.com*, Jan. 24, 2001. [Online]. Available: <https://www.theguardian.com/business/2001/jan/24/3>. [Accessed Dec. 11, 2020].

More on our Instagram! @ieee_uoft

Our Work- TIN

Technical Interview Night (TIN) – October 5th

- Over 60+ sign-ups with representatives from Qualcomm, Stripe, Intel, Synopsis, Amazon, RBC, Huawei, Vena Solutions, Replicant & more.
Also networking event you don't want to miss



More on our Instagram! @ieee_uoft

Our Work- NewHacks



NewHacks — November 4th-5th

- Expecting 700+ applicants
- 300+ participants at the event, creating projects utilizing hardware
- High engagement in networking booths of Qualcomm, as well as technical workshops and mini-events run by IEEE UofT



More on our Instagram! @ieee_uoft

Our Work- MakeUofT



MAKEUOFT – February 17th-18th

- Record breaking 1200+ applicants
- 300+ participants at the event, creating projects utilizing hardware
- High engagement in networking booths of Qualcomm, as well as technical workshops and mini-events run by IEEE UofT



More on our Instagram! @ieee_uoft

Our Work- Workshops



Technical Workshops

- Workshops hosted throughout the year (Arduino, LeetCode, React, PCB, Django, etc.)



LinkedIn Certification



Certification System

- All our workshops will provide verified certificates!
- LinkedIn Certificate verification

Our Work- Cloud Computing



Cloud and open-source initiative

- Collaboration with UTMIST.
- The Open Source Cloud Initiative focuses on advancing **cloud infrastructure**.
- Members lead cloud-based and open-source workshops or work on major industry open-source projects.

Want to get involved?



First Year Associate Program

- Allow **first year** students to get first-hand experience with IEEE UofT's impact
- Offer mentorship & support to gain technical knowledge as well as soft skills
- Meet industry representatives and learn professional communication



Our network and alumni spans



Contact Us



ieee.utoronto.ca



[@ieee_uoft](https://www.instagram.com/ieee_uoft)



external@ieee.utoronto.ca

ECE Club

Ava Jakob, CompE Year 3 and
Harmit Goswami, CompE Year 3



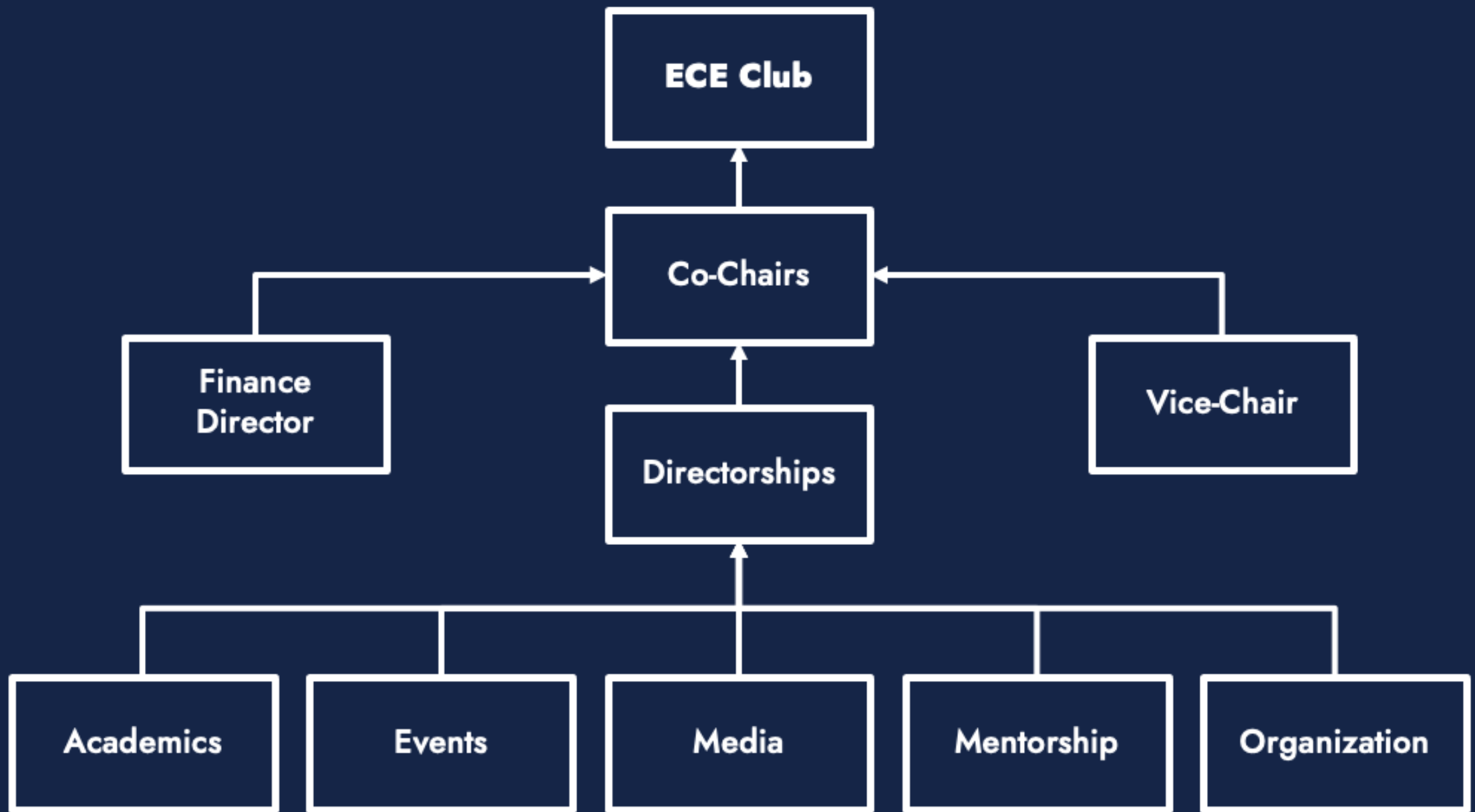
About Us

Ava Jakob (CompE 2T5)

- Vice Chair/Interim Co-Chair
 - Prev. Mentorship Director

Harmit Goswami (CompE 2T5)

- Finance Director/Interim Co-Chair
 - Prev. Facilities Manager



Academics

- Academic Advocacy
 - Class Representative elections take place in late September!
- Course feedback and Anticalendar on <https://courses.skule.ca>

ECEI 10H1 - Electrical Fundamentals

ECEI 10 is the first course that introduces you to the electrical side of ECE. It's split into two halves: the first covers electromagnetic fields, and the second covers electrical circuits. Because of the breadth of the material covered and the wide range of challenging questions they can ask, it's generally considered one of more challenging courses in first year.

Important Skills

Problem Solving, Memorization, Theoretical Knowledge.

Tips

- Go to lectures! The lecturers are generally good, and if you can't learn from yours effectively there are always other sections you can go to. Understanding the theory is key in this course.
- The online homework (called WileyPlus) will be annoying as they'll be lots and they'll be frequent, however do try to complete them all and understand how to the questions.
- Despite the difficulty of this course, the easier labs will almost guarantee you pass the course.

[View Exams](#)



Events

- Annual ECE Dinner Dance
- Previous Events:
 - Open Mic Night
 - Movie Nights in the Common Room
 - Games Night in Queen's Park
- Upcoming Events:
 - Stay tuned...



Media

- External Relations events
 - Network with alumni, companies, and other clubs
- New merchandise coming soon....
- Follow us on Instagram to stay updated! (@ece__club)



ECE_CLUB

Mentorship

- A program to help you transition into university during your first year
- A mentor to ask questions and receive advice throughout the year
 - Mentors are hand-picked to match with mentees
 - Mentoring events to connect with your mentor throughout the year



Mentee sign-up form

Organization

- ECE Common Room (BA1120)
 - From the front of Bahen, turn right on the second hallway until you reach the Common Room



- ECE Study Hall (SFB650)
 - Located in The Pit (SF Basement), next to the RBC ATM Machine



Follow us!

ECE Club links and social platforms:
https://linktr.ee/ece__club/

See you around Skule :)



ISTEP

Estelle Oliva-Fisher

Managing Director, Troost Institute



Become the engineering leader the future needs.



Institute for Studies in Transdisciplinary Engineering Education and Practice
UNIVERSITY OF TORONTO



Institute for Studies in Transdisciplinary Engineering Education and Practice
UNIVERSITY OF TORONTO

Courses, workshops, programs, and more!

**Visit uoft.me/ileadstudents to learn more and
sign up for our newsletter!**



Engineering Career Centre

Michael Tacorda, CHRP
Student Development Officer

WELCOME TO PEY CO-OP



Register for PEY Co-op

Haven't registered yet? Don't fret!

<https://engineeringcareers.utoronto.ca/explorepeyco-op>

What You'll Learn



**Process and
Requirements**



Benefits of PEY Co-op



Services and Supports

Upcoming Events and Opportunities

- Preparatory Program Orientation Sessions
 - Wednesday, September 6, 2023, 2:00 – 3:00 PM ET (Virtual)
 - Tuesday, September 12, 2023, 10:00 – 11:00 AM ET (Virtual)
 - Wednesday, September 20, 2023, 5:30 – 6:30 PM ET (In-Person)
- Peers in the Pit
 - Wednesday, September 20, 11:00 – 2:00 PM (Drop-In)
 - Sanford Flemming Pit (Atrium)

Upcoming Events and Opportunities

PEY Co-op Preparatory Program (Cohort 4)



Welcome to the Engineering Career Centre's (ECC) Introduction to PEY Co-op!

→ Book an Appointment

→ Events and Workshops

→ Contact Us

→ PEY Co-op Journey Maps

→ First-Year Resources

→ Program Requirements

A stylized night landscape with dark blue mountains and a deep blue sky. In the upper left, a large, light blue moon with craters is visible. In the upper right, a portion of a bright orange sun is shown. Small white stars are scattered across the sky.

WELCOME TO PEY CO-OP

Questions?

sd.ecc@utoronto.ca

Welcome to ECE!

Academic Orientation 2023



- [linkedin.com/school/eceuoft](https://www.linkedin.com/school/eceuoft)
- twitter.com/eceuoft
- [instagram.com/eceuoft](https://www.instagram.com/eceuoft)
- [tiktok.com/@eceuoft](https://www.tiktok.com/@eceuoft)
- [facebook.com/ECEatUofT](https://www.facebook.com/ECEatUofT)

Welcome to ECE!

Academic Orientation 2023

