1st Year Orientation
2018-2019

Farid N. Najm
Professor & Chair
ECE Department

f.najm@utoronto.ca
Welcome

Welcome to...
The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering

The purpose today is to
- Introduce you to people in our department
- Provide advice to help make your time here successful, rewarding and exciting

Presentation slides are available online at
http://www.ece.utoronto.ca/undergraduates/announcements
Electrical and Computer Engineering (ECE)

- is a very broad and expanding field
- is responsible for much dramatic change in the modern world
  - Technologies: chip technology, micro/nano-manufacturing, the PC, the internet, the world-wide web, online commerce, social media, the smartphone, mobile technology, connected devices, biomedical devices, neural implants, e-health, the whole IT revolution, ML, AI, etc.
ECE

- ECE is also responsible for many recent global companies:
  - Facebook, Google, Twitter, Instagram, Snapchat, LinkedIn …
- ECE also participates in many other exciting technologies …
  - IoT, ML, Autonomous Vehicles, Wearable Computing …

Figure 1. Hype Cycle for Emerging Technologies, 2018

- Engineering can change the world
- You are setting out on an exciting adventure!
Introductions
First Year Office

**Services:**
- Transition and Retention Programs
- Early Warning (mid-term performance feedback)
- Registration and Schedules
- Academic and Program Advising
- Counselling and Referrals

**Contact:**
- Leslie Grife, First Year Advisor
- Emzhei Chen, Assistant Director, First Year Academic Services
- Office Location: Galbraith (GB) building, Rm 170
- Email: firstyear@ecf.utoronto.ca
- Webpage: http://firstyear.engineering.utoronto.ca
ECE Undergraduate Office Staff

Leanne Dawkins
Program Manager & Counsellor

Jayne Leake
Administrative Coordinator & Counsellor

Karen Irving
Student Advisor & Undergraduate Information Services

Neena Peterson
Information Services Assistant
ECE Department Leadership Team

Myself: Professor Farid Najm
Chair of ECE Department, room SF 1024

Professor Raviraj Adve
Associate Chair for Undergraduate Studies

Professor Sean Hum
Associate Chair for Graduate Studies

Professor Jason Anderson
Associate Chair for Research
Eight Useful Things to Know*

*To help you succeed at ECE/U of T
1. Manage Your Time Well

- Don’t get behind in your work, it builds up!

- **Easier said than done:**
  - Do important things first, Set priorities
  - Don’t get distracted!
    - Limit your time on social media
    - Snapchat, Instagram, Twitter, Facebook ... they can wait
2. Get a Good Study Group

- It helps to have a group to discuss your work with
  - It is perfectly OK to get help from peers while studying/learning
  - Practicing engineers always work together

- However, it’s NOT OK to copy someone else’s work!
  - There is a fine line between group study and copying/cheating
    - Study together to figure out the concepts and check your understanding
    - Work individually to do your homework, project, assignments, etc.
  - Be very careful
    - A first offense ends up on your record
    - A second offense will get you suspended
  - Note: the copy-ee is equally guilty under U of T policy

- We expect you to act as honest, responsible adults
3a. Don’t Get Too Hung up on Marks

- **Yes, marks are important**
  - you’ll be judged for jobs and scholarships, in part on marks

- **However, your future success will also depend on:**
  - Your understanding of the material
  - How you put all the pieces together
  - If you can get the job done
  - How well you work with others
  - Your communication skills

- **A common interview question: describe your projects!**
... on Marks, cont’d

- Engineering grades are likely lower than high school marks
  - why? Everyone here did well in high school

- Sometimes, tests will have very low marks
  - why? It can be hard to set a test at just the right level

- Even if a test looks really hard, NEVER GIVE UP!
  - everyone else is dealing with the same difficulty
  - if the marks come out too low, they will likely be adjusted in some manner at the end of the term, after all the marks are in
3b. Learning

- You’re really here to learn, and ... to learn how to learn
  - ECE and engineering will keep changing during your career
  - pick up here the skills required to continue learning in future

- There is no such thing as a stupid question
  - It is far worse not to ask a question than to risk looking silly

- Everyone around you may be just as “lost” as you are
  - Asking questions is an essential part of learning
4. We’re Here To Help

- At some point, you may run into trouble
  - personal/family; academic; test anxiety

- The ECE Undergraduate office is in SF-B600
  - don’t hesitate to drop by to ask questions or ask for help
  - we are happy to help

- Counselling available
  [http://www.studentlife.utoronto.ca/hwc/workshops](http://www.studentlife.utoronto.ca/hwc/workshops)
  - learning skills
  - exam anxiety workshops, and much more!

- Central Web site: [studentlife.utoronto.ca](http://studentlife.utoronto.ca)
5. Get Exercise – Stay Healthy

- You’re way better off, life-long, if:
  - you take an hour to get some daily exercise
  - pick some activity that you like
  - do it regularly!

- If you get frustrated, go work out
  - at Hart House
  - at the Athletic Centre
  - at your local park/centre/gym

- Athletic Centre runs many free programs
Many Sports & Activities

- **Badminton**, Baseball, Basketball, Cheerleading, Curling, European Handball

- **Fencing**, Field Hockey & Indoor Hockey, Football, Golf, Gymnastics, Hockey

- **Indoor Cricket**, Lacrosse, Mountain Biking, Nordic Skiing, Rowing, Running

- **Skating**, Soccer, Squash, Table Tennis, Tennis, Track and Field

- **Triathlon**, Ultimate Frisbee, Volleyball, Wrestling
Many other Activities at UofT!

- This is a big place!
- There are many things going on
  - Music, drama, dance, sports, clubs of all descriptions

- Go to:

  ulife.utoronto.ca
6. Read Your Email from Us!!

- Important email from us goes to your UTORmail account (@mail.utoronto.ca)
  - You will get that email account information when you activate your TCard at the TCard office in Robarts Library
  - This is the only address where we will send you email

- You MUST read your email sent to this account
7. Proper Use of Computers

- The computers and networks that you will use here are U of T property.

- They come with certain rules, including:
  - You can’t use them to intentionally harass people.
  - You can’t use them to steal stuff.
    - a. downloading music/video/apps that you don’t have a right to is stealing
    - b. in future, you may well make a living selling things that can be downloaded – software, circuits etc.
8. *Never Trust a Computer*

- They can break at any time, deleting your project report, assignment, lab, etc.

**BACK UP YOUR COMPUTER!**

- **On USB stick/Thumb Drive/Memory Keys, DVD, CD**
  - a. USB drives are cheap!

- **On ECF Computer Systems**
  - a. which are backed up themselves

- **On some cloud backup facility – e.g.,** [dropbox.com](http://dropbox.com)
Opportunities & Student Clubs

- ILead
- IEEE
- ECE Club
- ECE Ambassadors’ Program
Institute for Leadership Education in Engineering

ILead
Wallberg Building, Suite 204
Milan Maljkovic
Troost Institute for Leadership Education in Engineering

HOW TO CONNECT WITH TROOST ILEAD

Leadership Labs
Kick-start your leadership journey here! Drop in on practical workshops geared towards your personal and professional development.

Club Leaders Support
Get tailored workshops, support on a specific problem or initiative, or a crash course on improving your confidence and effectiveness as a club leader.

ILEAD: Grad
Give your MEng, MASC, or PhD experience an edge by joining this graduate student-led group focused on skill and social development.

OPTIONS
Explore diverse career options with a group of fellow PhDs and post-docs. Clarify your ambitions to guide and empower your job search.

FIELD Summer Program
Take part in hands-on workshops on personal growth and career preparation over the summer. Field trips included!

SHIFT
Start a project, compete in a challenge, or attend workshops to expand your perspectives on the complexities of societal change.

Summer Fellowship
Join a tight-knit group of student leaders who’ll push each other to become even better at driving change in their clubs and teams.

Student Team
Join a dynamic team of students to deliver leadership opportunities to your peers. Uncover your personal potential along the way.

Academic Courses
Gain extraordinary insight into who you are and who you can be through our 14 for-credit leadership courses. Courses are eligible for the Engineering Leadership Certificate, Engineering Business Minor, and Emphasis in ELITE.

Minimum Time Commitment — Hours Per Semester
- 1-10
- 11-20
- 21-30
- 31-40
- 40+
Institute of Electrical and Electronics Engineers at U of T Student Branch

IEEE U of T
Mohaimen Khan
http://ieee.utoronto.ca/
WHAT + IF = IEEE
Advancing Technology for Humanity
INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS

- Leading technical development club for engineering students at U of T
- Consists of three chapters: Computer, Electronics, and Energy
- Host numerous technical and professional development events throughout the year
IEEE U OF T CHAPTERS

Learn more about each of our initiatives.
**Computer**
- Focuses on computer science and software side of IEEE
- Brings coding competitions, software workshops, industry tours and technical talks to the students

**Electronics**
- Deals with everything hardware, from embedded systems to analog circuits
- Aims to help students gain technical expertise and industry exposure in these fields

**Energy**
- Aims to create a platform for students to learn and experience emerging technologies
- Advances and trends in the power and energy sector through various events and networking sessions.
IEEE EVENTS

Look forward to many exciting events planned throughout the year.
HARDWARE HACKATHON

February 2019

A 24-hour hackathon where participants from different Universities come together to design, make, and present solutions to problems we face using microcontrollers, single board computers, and other hardware technologies.
January 2019

An innovative software technology conference that gives students a unique view on incoming technologies, hear fascinating lightning talks, and network with speakers to gain valuable insight into the software industry.
January 2019

An energy based case competition that pushes students to solve some of the world’s pressing challenges with respect to energy generation, delivery, and consumption. Working in teams, students compete in a hackathon format, with an energy related focus.
WHO DO WE WORK WITH?

Exciting industry guests are just a part of what we bring to you.
TELUS

Platinum Sponsor
A market leader in cellular IoT, on the LTE-M/NB-IoT network.
XEROX

Gold Sponsor
A global influence in digital and print media technology solutions.
Event Partner
An innovator in education, information, and the smart future.
GET INVOLVED

Learn about how you can get involved with IEEE.
Contact Us

- ieeeoutstudentbranch@gmail.com
- IEEE University of Toronto Student Branch
- Skule Club Fair

The best way to stay in touch is to subscribe to our monthly newsletter!
THANKS!

Any questions?
Contact us at
ieeeestudentbranch@gmail.com
or check out our website at
ieee.utoronto.edu
Electrical and Computer Engineering Club

ECE Club
Sandford Fleming B640
Yashi Kaushik
ECE Ambassadors & ECE CONNECT

Jessica MacInnis
Senior Communications Officer
jessica.macinnis@utoronto.ca
Volunteer with ECE!

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

Share that enthusiasm with prospective and incoming students while gaining professional experience, networking opportunities and training.

BECOME AN ECE AMBASSADOR

Apply: uoft.me/ece-ambassadors
CONNECT

An online platform to enrich your professional network and connect you with the Skule™ community.

SIGN UP TODAY
UOFTECECONNECT.CA
Wrap-up

F. Najm
Finally

- Four (or Five, with PEY Co-op) years from now:
  - You can look forward to graduation and Convocation
  - A delightful ceremony to celebrate your hard work and learning
Have a Great First Year!

http://www.ece.utoronto.ca/undergraduates/announcements