Welcome to
Electrical and Computer
Engineering
MEng Orientation

Friday, September 13, 2024 10:00 a.m. – 10:30 p.m. ITB A113 B

Dr. Shiva Kumar Associate Chair Graduate



Welcome to ECE!

Agenda

- Introductions
- Message from the Chair
- About ECE
- Degree Options
- Course Offerings
- Graduate Exams
- Student Requirements
- Co-op, Career & Experience
- Health and Safety
- Before You Ask
- Get Involved





Introduction - ECE Main Contacts



Clara Lau
Administrative Graduate Assistant
(interim)



Cheryl Gies Administrative Graduate Assistant (on leave)



Mary-Anne Bechamp Team Lead, Academic Programs



Dr. Shiva Kumar Associate Chair, Graduate Professor



Dr. Mohamed Bakr Department Chair Professor



Shelby Gaudrault Academic Department Manager



Brittany Donovan Administrative Assistant



Tracey Coop
Undergraduate Administrative Assistant

More Faculty and Staff





A Message from Our Chair

Welcome to the Department of Electrical and Computer Engineering (ECE)!

Our department is one of the fastest growing in McMaster with 44 faculty members from diverse areas of electrical and computer engineering. Our talented professors and students are changing the world through their research.

Our faculty and staff members are committed to delivering the best learning experience to our students.

We are proud to welcome a pool of new talented graduate students.





ECE by the Numbers



- 2 Canada Research Chair holders
- 6 IEEE fellows
- 3 funded chairs
- 3 Fellows of the Royal Society of Canada
- 2 Distinguished University Professor
- 4 Emeritus



14
Administrative and Tech Staff



ECE by the Numbers











Electrified & Autonomous Transportation



Electromagnetics & Photonics



Networks

Integrated, Embedded and Interconnected Systems



Microelectronics & VLSI



Optimization, Learning & Control



Power Electronics & Electric Machines



Signal, Image & Video Processing



McMaster University Automotive Research Centre



Centre for Research in Micro- and Nano-systems

Centers and Institutes



ECE by the Numbers

291
Graduate
Students

1078
Undergraduate
Students

Graduate Students:

- 74 MEng
- 63 MASc
- 154 PhD

Undergraduate Students:

- 265 Level 2
- 275 Level 3
- 299 Level 4
- 55 Level 5
- 184 Co-op





Degree Options & Requirements

MEng Course Based

- Completion within 12-16 months
- 7 "half" (3 unit) courses or 21 units
 - four must be 700-level within ECE
 - Maximum of two ECE 600-level (department approval)
- Courses outside department require permission form (see below)
- Consult with department admin and/or associate graduate chair



- Completion within 12-16 months
- 6 "half" (3 unit) courses or 18 units
 - four must be 700-level within ECE
 - Maximum of two ECE 600-level (department approval)
- Courses outside department require permission form (see below)
- Consult with department admin and/or associate graduate chair
- Completion of ECE 701 (must find a supervisor, not taken in first term)
- Completion of ECE 790/792 (non-credit, Pass/Fail)



Request for In-Program Adjustment Form

Complete this form if taking courses outside of ECE to count towards your degree completion



ECE Course Offerings

- Graduate level courses are numbered using 700 series (e.g. 701, 702, ...)
- 600 level courses are combined with 400-level undergraduate courses.
 - Courses at the 600-level usually have an additional assignment
 - Limited seating is available
 - Reminder instructor permission is required for 600-level courses
- Course offering are available in various areas:
 - ECE website
 - Courses Tab
 - Resources/Graduate Tab
 - Mosaic upon enrollment
 - Academic Calendar
- Research your selections.
- Unless otherwise indicated, courses are held in person
- Most courses use Avenue to Learn





Other Course Offering

- 700-level courses outside ECE may require permission from instructor of course
- Must complete permission form, for the courses to count towards degree completion
- Courses outside of McMaster may count towards degree completion, only if similar courses are not offered by the department or the University. Based on individual and unique circumstances.

Additional questions about courses consult with the Associate Chair, Graduate – Dr. Shiva Kumar.

General inquires consult with grad admin – Clara Lau.



Final date to add course: September 20!
Final date to drop a course without a W/F grade on the transcript: October 8!



Request for In-Program Adjustment Form

Complete this form if taking courses outside of ECE to count towards your degree completion



ECE 701 – Project Course

Students must find a supervisor before enrolling

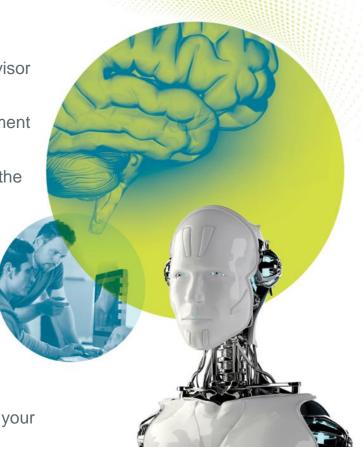
Projects to be conducted under the guidance of an ECE professor.

 Students are responsible for contacting and finding a willing supervisor for project courses.

 Refer to and research the <u>Faculty members profiles</u> on the department website.

 The scope of the project will be defined during the discussion with the supervisor.

- A project report is due at the end of the term.
- Usually taken after the first term.
- Completion of ECE 790/ ECE 792 is also required.
- If you cannot find a supervisor, make sure you complete the required course requirements for degree completion.
- There are no guarantees a professor will be available to supervise your project.





ECE 790/792

Foundational Communication Skills for Graduate Research in ECE

Students in MEng Project must take either ECE 790 or ECE 792

- ECE 790
 - develop skills in communicating their research to a broad audience via a series of workshops and coaching sessions, culminating in a graduate student research presentation day



ECE 792

 an enriched version of ECE 790 providing coaching on technical presentations, such as those typically given at conferences or in group meetings, and on technical writing

Consult with the project supervisor about which course to take.

REMINDER! Non-credit, pass/fail grading.



F Grade

The minimum passing grade in a graduate course is a B-

- Failure in a course is reviewed by the School of Graduate Studies and requests a departmental recommendation regarding the student
- In the absence of a department recommendation, the student will be required to withdraw
- Those allowed to remain, must either repeat or replace the failed course
- A second F-grade will not normally be allowed to continue in the program
- F-grades remain on the transcript
- If you run into difficulties, talk to graduate advisor or your project supervisor before the DROP date

Ref: <u>Academic Calendar Section 2.6.11</u>



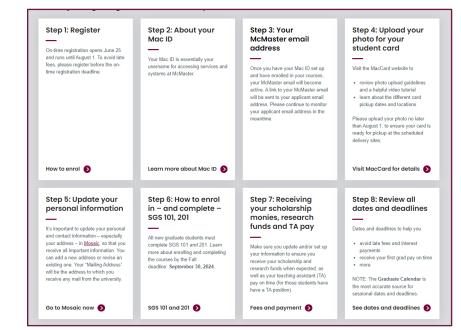
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Final date to drop a course without a W/F grade on transcript: October 8!

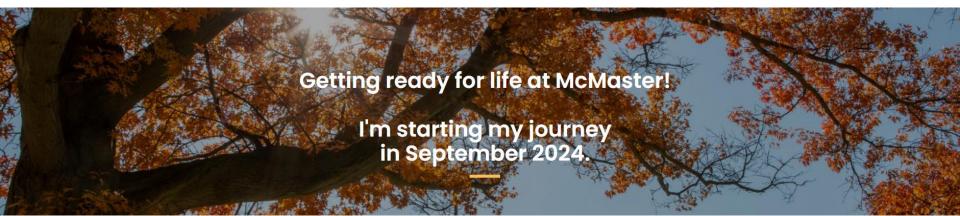




Student Requirements

- By now the following should be complete:
- ☐ SGS 101 due Sept 30
- ☐ SGS 201 due Sept 30
- Enrolled in all three terms
- Have your McMaster email and MS Teams
- ☐ Have your student card One Card
- Updated your personal information and banking details







Student Requirements

Your degree is your responsibility!

Please make sure to review the following department requirements:

- ☐ Carefully review the <u>ECE handbook</u> ECE website/Resources/Graduate
- Enroll in all three terms
- Complete SGS 101 & SGS 201- due Sept 30
- Complete Career Planning report due 1 year from start of program
- Complete appropriate Health and Safety
- Review your academic advisement report in Mosaic for updates on degree requirement/completion
- Update your Degree Checklist Coming Soon!





Student Requirements – Career Planning

Graduate students are required to attend 1 of 3 Career Action Report Planning workshops during their 1st year of studies.

- Register in Oscar
- Attend a workshop
- Complete the required report
- Submit the completed report to the grad admin within 1-year of start of program

Deadline: August 31, 2025





The Centre for Career Growth and Experience (the Centre) team supports students with employment preparation and career readiness, connects students with employers and provides opportunities for students to gain meaningful experiences.



Visit Co-op for Graduate Students



Graduate Co-op and Career & Experience

Master's and PhD students may complete 4 to 12 months of co-op experience

- Attend one of the interactive Graduate Co-op Information Sessions in the fall or winter term - visit OSCARplus event calendar for dates.
- Speak to your academic supervisor (MASc/PhD) or department admin (MEng)
- Complete the <u>Graduate Supervisor Permission Form</u> prior to the final date to <u>add courses</u>
 - MEng students only, the Associate Chair, Graduate acts as your supervisor

NOTE:

- MEng/MASc It is recommended that students complete ENGINEER 701 within the first 1-2 terms of study.
- PhD it is recommended that students complete ENGINEER 701 after 2 years of study.



Visit Co-op for Graduate Students



Graduate Co-Op Services: Engineer 701

Once you have a comprehensive understanding of co-op, follow these steps to enroll in Engineering 701:

Step 1 Enroll

 Enroll directly in Mosaic for the ENGINEER 701 – C01 Work Term Preparation (Lecture) course.

Step 2 Register

 Complete the ENGINEER 701 Registration process https://forms.office.com/r/mppBz9bTAk

Step 3 **Email**

- Submit your signed permission form to gradcoop@mcmaster.ca
- Include your student number in the body of your email).



Co-op and Career & Experience

Before registering your co-op work term, here are some important reminders and information:

International Students:

Ensure that your co-op work permit remains valid throughout the entire duration of your co-op If additional paperwork is required or if you have any questions regarding work permits, please contact immigration@mcmaster.ca or gradcoop@mcmaster.ca

GSA Supplementary Plans:

Please be aware that certain services, such as extended health and dental coverage/access to the HSR may be temporarily impacted for students on long-term co-op placements if they are not enrolled in academic units. For more information visit https://gsa.mcmaster.ca/services/health-and-dental/

Student Loans:

Please be aware that they may be affected by your co-op work terms, particularly if your co-op work term is longer than 6 months. If you have any questions about how your co-op work term may impact your student loans, please reach out to the Student Financial Aid office for guidance.



Co-op and Career & Experience

Courses While Working:

The only course that should be on your record for the term(s) while you are on co-op is Engineer 702, if you have any remaining courses other than Engineer 702, this will result in you being charged for tuition those terms. You will not be able to drop your last course so please let us know and we will write SGS to have your last course deleted for the term.

Fees:

Enrollment in your first Co-op work term (done by ECCS) will trigger a one-time charge of \$1300.00 added to your student account. Payment of fees is due at the beginning of the work term, and late payment will be subject to interest/late charges. This charge is only applied to your first Co-op term, and there are no additional career fees for subsequent work terms.

Once we have reviewed and processed the submitted documents, we will respond to you and inform your department accordingly. If you have any further questions or concerns, please don't hesitate to contact us. We wish you the best for your co-op work term!

It is your responsibility to review your mosaic record to ensure your tuition is correct so please review your record after the course has been dropped to ensure your tuition and courses are correct.





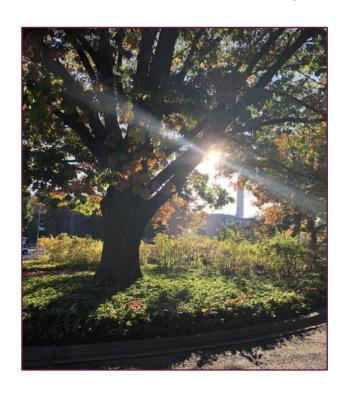
Health & Safety Training

Health and Safety is mandatory for all graduate students. It is the responsibility of the student to complete the required training.

Core Health and Safety courses:

- SAFE training (replacing Slips, Trips and Falls, Asbestos Awareness, Fire Safety, Ergonomics)
- ☐ Health and Safety Orientation
- Violence and Harassment Prevention
- WHMIS 2015

Deadline: October 15





Link: Human Resources Services * Employee * Health, Safety & Well-Being * Our Safety * Health & Safety Training



Before You Ask

Familiarize yourself with these resources:

- ECE Website
- Graduate Resources ECE Handbook
 - Use the graduate book that is assigned on the start of our admission
- Academic Calendar
- School of Graduate Studies SGS website



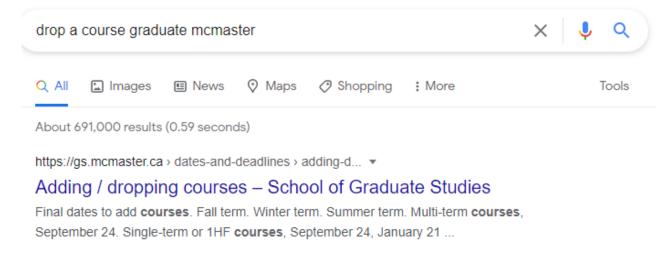






Put key words in any search engine:

- graduate
- Mcmaster
- > ECE





Get Involved

Students are encouraged to get involved:

ECE Fiesta

 Graduate student group meets biweekly for coffee and conversation

Engineering Graduate Society

 a student run organization dedicated to supporting engineering graduate

School of Graduate Studies Events

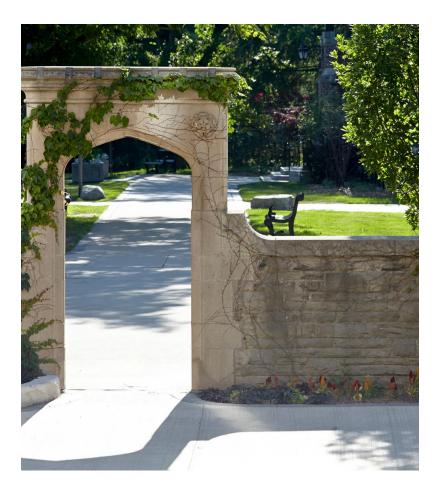
 Hosts a variety of events and workshops for new, current and international students

Graduate Student Association

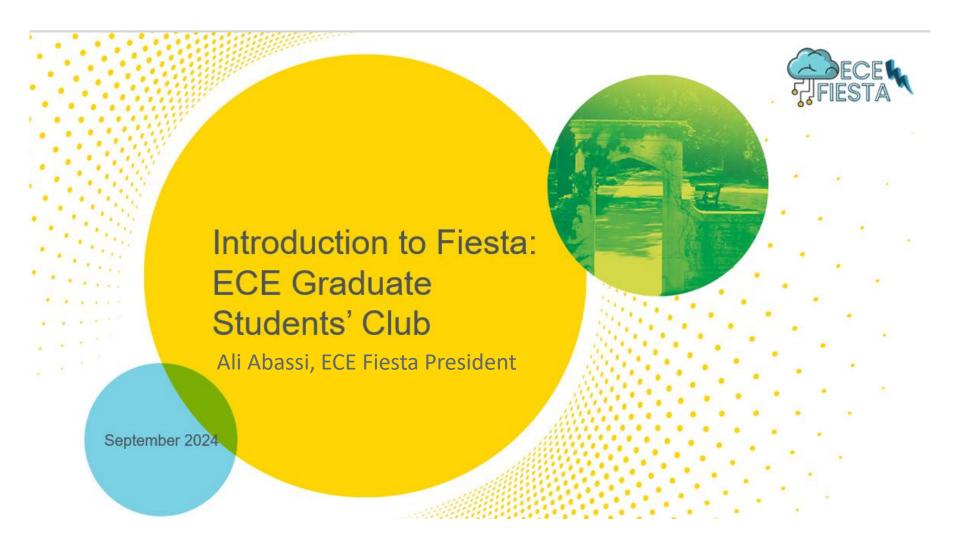
 Supports a variety of graduate clubs and events













Introduction to ECE Fiesta

Who we are!

- A student-oriented club
- Events we hold:
- Coffee house
- Board game nights
- Halloween parties, etc.





Current Members



President: All Abbasi



Vice President
Mohamed Elsayed



Vice President Roxana Nikoukar



Event Organizer: Abu Illus Falsal



Administrative Assistant: Zahra Sadeghi



Administrative Assistant: Rishad Arfin



Treasurer: Yasaman Niazi



Event Organizer: Sadra Tavakollan



Communication Chair: Lucas Nahid-Mobarakeh



Social Accounts

You will receive event notifications over email and via our channels.

You will receive a series of slides from us about the "things that help you settle down here"!





Interested in joining the club? Just reach out to us!



