



University of Windsor
Department of Electrical and Computer Engineering

ECE Graduate Students Handbook

Electrical and Computer Engineering
University of Windsor
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“The land University of Windsor sits on is the traditional territory of the Three Fires Confederacy of First Nations, comprised of the Ojibwa, the Odawa, and the Potawatomi. We have been given the opportunity to learn and grow as people and educators, and we owe it to the children of these lands—past, present, and future—to provide them with the best, most truthful education in which they can learn, grow, and be inspired.”

1. INTRODUCTION

As a graduate student, we welcome you to the Department of Electrical and Computer Engineering!

This handbook outlines the Department of Electrical and Computer Engineering research-based Master of Applied Science (MAsc) and Doctor of Philosophy (PhD) programs, highlighting the degree requirements you will need to obtain in order to complete your program. The typical timelines and information on transfer between the MAsc to PhD programs are also outlined.

Graduate level research-based programs require a more independent approach to study. It is important to recognize that it is your responsibility to organize your Committee, arrange Committee meetings and ensure you maintain progress towards your degree in a timely fashion. You should consult with the Graduate Secretary for the Department of Electrical and Computer Engineering for help in this task, to identify timelines and to submit any relevant required forms. Do not rely on your supervisor, the Graduate Coordinator or the Graduate Secretary to ensure you stay ‘on track’!

We hope you enjoy your time in Grad School and look forward to working with you as you pursue your passion in engineering and develop the necessary skills to mark yourself out as an accomplished independent researcher!

Last Updated August 2021

2. ACADEMIC INTEGRITY

The University expects that all researchers will adhere to the proper standards of intellectual honesty in the written or spoken presentation of their work, and will at all times acknowledge in a suitable manner the contribution made by other researchers to their work, as outlined in the [Senate Policy on Authorship](#) and the [Policy Statement on Research Personnel](#). If you are unsure as to what constitutes plagiarism, it is defined in the [Student Code of Conduct](#).

Grades for academic work in which plagiarism or other misconduct has been found to have occurred in accordance with the University's disciplinary processes under [Bylaw 31: Academic Integrity](#), and that have been acted upon by the Academic Standing Committee, cannot be appealed to the Faculty of Graduate Studies Executive Committee.

In case of any doubt, you are strongly urged to consult with your instructor or thesis supervisor.

In cases where you feel that your intellectual property or copyrighted material has been plagiarized, complaints should be made in writing to the Dean of Graduate Studies.

Plagiarism: the act of copying, reproducing or paraphrasing portions of someone else's published or unpublished material (from any source, including the internet), without proper acknowledgement. Plagiarism applies to all intellectual endeavors: creation and presentation of music, drawings, designs, dance, photography and other artistic and technical works. In the case of oral presentations, the use of material that is not one's own, without proper acknowledgment or attribution, constitutes plagiarism and, hence, academic dishonesty. Students have the responsibility to learn and use the conventions of documentation as accepted in their area of study.

3. PEOPLE YOU NEED TO KNOW

- a) Your supervisor (and potential co-supervisor)
- b) Your thesis/dissertation committee members
- c) Graduate Secretary: Ms. Andria Ballo, CEI 3042, andria@uwindsor.ca
- d) Graduate Academic Advisor: Dr. A. Emadi, CEI 3055, arezoo.emadi@uwindsor.ca
- e) ECE Department Head: Dr. B. Shahrrava, CEI 3033, shahrrav@uwindsor.ca
- f) Engineering Computing Services: Mark Gryn (markg@uwindsor.ca) and Srabanti Chitte (srabanti@uwindsor.ca), CEI 2158
- g) Manager of Technical Support: Andrew Jenner, CEI 2011, jenny@uwindsor.ca
- h) Learning Specialist: Lisa Salfi (lisa.salfi@uwindsor.ca) and Dr. Donald Bourne (dbourne@uwindsor.ca)
- i) Clinical Therapist: Giselle St. Louis, CEI 1160, Suite 1165, giselle@uwindsor.ca
- j) International Student Advisor: Laura Ducharme, lducharm@uwindsor.ca

4. GETTING STARTED

The following documents and information should be obtained/consulted upon your arrival on campus and/or in the beginning of your program. The list is not all-inclusive.

- a) UWin email address. All your communications must be through your university email address – [UWIN INFORMATION](#)
- b) [The Registrars UWIN Student Guide](#)
- c) Receive your [UWIN ID Cards](#) (CAW Student Centre)
- d) Contact Registration Office and present required documents mentioned in your admission letter. They are in Chrysler Hall North
- e) Be sure to keep the UWINSITE updated with your current information including local address, phone, and Email
- f) Employment Number – At Human Resources, forms to be completed and returned to the 5th floor of Chrysler Hall Tower. Forms can be found online [Student Appointment](#)
- g) You may request access to CEI building from [Key Control](#)
- h) Contact Andrew Jenner and request a desk in one of the graduate student areas
 - a. Ask your supervisor if you need access to any other lab
- i) Contact Mark Gryn or Srabanti Chitte for computer access
- j) CMC Account – ask your supervisor if you can create and hold a [CMC](#) account (your advisor must hold a CMC subscription)
- k) International Students:
 - a. [International Student Centre](#) – will need to see your study permit. ISC office has information regarding health care and immigration matters
 - b. [Obtain](#) your [Social Insurance Number \(SIN\)](#) – this is required to obtain an Employee Number
- l) Important Note: Any form you may need to fill during your program **MUST** be submitted to the Graduate Secretary and NOT online (even if the form states that it can be submitted online). Forms that are submitted online on UWINSITE by the students will be rejected.

5. HEALTH AND SAFETY TRAINING

All students must complete mandatory safety training provided by the University of Windsor and follow the safety procedures mandated for the laboratory(s) in which they are working. Required training may include [WHMIS](#), [Health & Safety in the Workplace – Orientation guide for workers](#), [Violence & Harassment Prevention in the workplace](#), [Lab Safety Training for Researchers](#), [Gas Cylinder Training](#), [Fume Hood training](#), [Chemical Spill Training](#). Please consult the [University of Windsor – Safety Training](#) for more details.

In addition, each student must receive training from the appropriate technician or faculty member on any instrument that they wish to use prior to using that instrument. In most

situations, the student must also obtain permission from the appropriate technician or faculty member responsible for an instrument before using the machine. All students must adhere to all rules concerning the use of each instrument.

Students may not bring or keep any food in the laboratory. Students are not allowed to bring water, coffee or tea to the lab.

6. YOUR THESIS SUPERVISOR

Your supervisor must be a regular or cross-appointed member of the Departmental Graduate Faculty. Your supervisor is normally chosen prior to admission and your offer letter will typically have highlighted your supervisor. In some circumstances you may have two co-supervisors.

You should:

- a) contact your supervisor when you accept your offer letter and prior to the beginning of your 1st semester,
- b) contact your supervisor as soon as you arrive on campus on your first day,
- c) communicate regularly with your supervisor.

Your supervisor is the most important individual in your graduate education. Your supervisor is an advisor, counselor and research director! In addition, your supervisor may also be your employer, and you may receive a Research Assistant (RA) stipend which is paid from your supervisor's research budget. She/he will be your first port of call for guidance for everyday questions relating to your research. Your supervisor will help keep you on track to achieve the goals necessary to attain your MASc or PhD qualification.

The [Faculty of Graduate Studies](#) encourages the establishment of clear expectations through open dialogue between you as a graduate student and your research supervisor(s). They have designed a document to be completed by both the student and the supervisor to help avoid future conflicts and to ensure that all aspects of the supervisory relationship are being considered. A copy of this document can be found [here](#). We strongly encourage you to complete this [form](#) with your supervisor.

This document can be revisited any time throughout the degree program when there are changes to the student's program or direction of research. This document was adapted from the McMaster template and after guidelines and documents in use at other Canadian universities.

7. MASC AND PHD PROGRAM REQUIREMENTS

7.1. DURATION

MASc: The Faculty of Graduate studies stipulate (i) a minimum duration of a Masters degree as one calendar year and (ii) the MASc must be completed within three consecutive calendar years. The normal duration of a research based MASc is two calendar years (typically 6 terms).

PhD: The Faculty of Graduate studies stipulate (i) a minimum duration of a PhD degree is three calendar years of full-time study and (ii) a maximum of seven consecutive years if a student enrolled directly into the PhD program or six consecutive years if a student has one year's advance standing (e.g., already holds a Masters qualification). The normal duration of a PhD is four calendar years (typically 12 terms).

Students whose program limit has expired must [request an extension](#) to their time limit.

7.2. CONTINUOUS REGISTRATION

You must register every semester until you complete your program.

- a) Continuous registration requires enrolling in **ELEC8970** – MASC Thesis (for MASC students) or **ELEC9980** – PhD Dissertation (for PhD students) while conducting research.
- b) You must be registered every semester unless you are on an approved [Leave of Absence](#) (LOA). [Request](#) for LOA must be [completed](#) prior to the last course change date for the semester.
- c) Registration requirements applies to all students including those who are targeting the Phase I tuition refund deadline:
 - a. [Registration requirement for students who are defending and deposition and tuition refund deadlines \(Phase I and Phase II\)](#).

7.3. COURSES

Students must complete satisfactorily at least four graduate level courses prior to the thesis defense. Students should seek their supervisor's recommendation to select their graduate courses and register for those courses prior to the Add/Drop [deadline](#).

These courses are normally drawn from graduate level courses offered within the Department of Electrical and Computer Engineering (ELEC-8xxx), but appropriate courses offered in other Departments may be taken for credit with the consent of your supervisor, department, and the Faculty of Graduate Studies by filling and submitting the [Course Substitution Request Form](#). Students must fill the form, obtain their supervisor signature, and submit the complete form to the Graduate Secretary. **Note:** forms that are submitted online by the students will be rejected. **Note:** All course substitutions must be approved and submitted by the last day for registration in the term in which the course will be taken.

Passing grade: For graduate students a minimum passing grade is 70%. Two grades below 70% will normally require you to withdraw from the graduate program.

Late registration: Late registration to a course is strongly discouraged and may only be allowed under [special circumstances](#). You need confirmation and approval of your supervisor, course instructor, and the graduate coordinator. [Form](#) must be submitted to the graduate secretary along with a clear explanation and justification.

7.4. EXAMINATION COMMITTEE

All students registered in MASc and PhD programs must have a supervisory committee. The role of the committee is to monitor your progress towards your MASc or PhD qualification. You should consult with your supervisor about the composition of your committee.

You should then contact each potential committee member for approval and signature on the [committee form](#). The committee form should be returned to the Graduate Secretary who will upload it to UWINSITE for approval by the Graduate Coordinator and ultimately on to the Faculty of Graduate studies for final approval.

Note: The examination committee form must be submitted to the Graduate Secretary **within the first term of graduate program**.

The composition of your committee should be as follows:

- a) MASc: consists of the thesis supervisor, at least one departmental reader and one outside program reader
- b) PhD: consists of the thesis supervisor, two departmental readers, and one outside department reader. At the dissertation defense an [external examiner](#) is added to the committee. The external examiner will be an expert in your area of research from another University and will be appointed near the end of your doctoral program to assess your thesis.

Note: The PhD external examiner must be a tenured faculty member at another University whom you do not have a collaborative program of research with. They will typically work directly in your area of research or in a closely related field. The external examiner [forms](#) must be approved by the Dean of Graduate Studies and this approval must be done at least 6 weeks before the defense date.

The above committee membership is the minimum required by University regulations. In certain circumstances additional committee members may be designated. These might include a co-supervisor or an additional committee member if it is felt beneficial to have additional expertise within your committee.

7.5. SEMINARS

MASc students must present a minimum of one seminar and PhD students two to three seminars to the Department and their examination committee.

The seminar(s) should describe your work within the context of current knowledge in the field. Your seminar should be 2 hours long with 25-30min time for your presentation. Your supervisor chairs the seminar. You should be prepared to answer questions from both undergraduate and graduate students alongside faculty and your examination committee. This provides you with an opportunity to prepare yourself for your MASc or PhD oral defense.

Note: You and your supervisor should arrange the seminar and invite all members of the examination committee (excluding the PhD external examiner) to your seminar. You and your supervisor should request the Graduate Secretary to prepare and circulate a notice of seminar.

7.6. ANNUAL REPORTS

Annual report is due on May 31 each year. You will receive email reminders about annual reports from the Graduate Secretary. You must arrange to hold a meeting with your supervisor to discuss the progress of your work and complete your [annual report](#).

Note: Your advisor should sign the form. The **form must be submitted to the Graduate Secretary prior to the May 31 deadline**. The form will then be submitted to the Graduate Coordinator for approval.

7.7. PHD COMPREHENSIVE EXAM

Students in the PhD program are required to take and pass a comprehensive exam:

- within the first twelve months

Passing your Comprehensive Exam is a key milestone in your progression towards your PhD qualification. The Electrical and Computer Engineering Comprehensive Exam Policy has changed as of Fall 2021.

Refer to the [ECE Comprehensive Exam Policy Guideline](#).

In the event of a failing grade, you may be allowed a second examination. A second failure will result in the requirement to withdraw from the program. If you are required to withdraw from the program, then you will leave the University immediately without a qualification. It is therefore important you prepare as thoroughly as possible for your Comprehensive Examination.

7.8. THESIS & DISSERTATION & DEFENSE

In addition to other program requirements, you will conduct [research](#) under your supervisor's direction and write a thesis (MAsc) or dissertation (PhD). Your supervisor advises on what is considered to be an acceptable quantity of material for a MAsc or PhD student in your specific field of research. The time for writing the thesis or dissertation is determined by you and your supervisor.

You must ensure you complete the thesis/dissertation according to the University standards. You must follow the [Format Requirements, Final Submission \(Deposit\)](#), as well as [Copyright & Authorship](#) guidelines. The thesis/dissertation should contain both a declaration of originality and an approval page for signing by your examination committee. These forms can be found [here](#). It is important to use a University-approved template; a thesis/dissertation requires a non-standard set of margins (particularly extra space on the left margin for binding). It is convenient

to download a template at an early stage in the thesis writing process to ensure uniformity across the entire document.

Once thesis/dissertation writing is well underway, you should consult the University [Important Academic Dates](#) on current timelines for “Format Checking”, “Deposit Deadline”, etc in order to meet financial deadlines (Phase I or Phase II) and to ensure your thesis/dissertation is defended in good time to attend a specific University Convocation where you will receive your qualification.

Note: All [Students Forms](#) can be found here.

Current information on timelines can be found under “[Thesis and Dissertation Forms](#)”. Planning for your defense starts several months before you intend to defend. The date and time of the defense cannot be confirmed until the thesis is complete, so it is important to get your completed thesis submitted as early as possible. The following is an approximate timeline. It is vital to consult with the [Faculty of Graduate Studies](#) to ensure you meet the relevant deadlines.

- a) Notice of MASc/PhD defense announcement must be sent out minimum 10 working days prior to the defense. [A public defense notice will be posted.](#)
- b) Examination committee members must have the final version of thesis/dissertation minimum two weeks for MASc and minimum four weeks for PhD prior to the defense.
- c) Examination committee members may request to have presentation slides in advance of the defense.

The final examination is the thesis/dissertation [Final Oral Defense](#) where you will present your dissertation/thesis at a public defense. Defense will be chaired by a member of graduate faculty who has not served on your committee. The defense chair for MASc and PhD is appointed by department and faculty of graduate studies, respectively. The defense should consist of:

- a) A 20 – 30 minutes presentation of your research. You may elect to talk about selected highlights of research rather than try and cover all aspects of your doctoral work.
- b) After the presentation, the chair will invite questions from the audience.
- c) After any questions from the audience have been answered, there will then be an opportunity for the audience to withdraw. If they elect to stay, then they must stay for the whole of the questioning period by the committee.
- d) The questioning period will comprise a series of questions from each committee member. The external examiner will take the lead.
- e) The external examiner who is an expert in your area of research will normally ask technical questions challenging your knowledge of the field and specific details relating to your research, methodologies, techniques and so on.
- f) Your outside program reader may ask more general questions, so be prepared to explain both your research, its impact and fundamental of your research works.
- g) Your remaining committee members will also be familiar with your work and may ask similar questions to the external to test your knowledge and understanding of the work and underpinning theories.

- h) Once questioning is complete, you and any members of the public are requested to withdraw, and the committee will deliberate your performance. You will then be called in and will be informed of the decision.

7.9. TRANSFER FROM MASC TO PHD PROGRAM

Current MASC Students who have performed well academically in both their coursework and their research may apply for admission to the PhD program without completion of the MASC thesis provided they successfully complete a transfer meeting. Recommendations from the program must be made no earlier than Term 3 and be approved prior to the completion of Term 4 of the MASC degree. Recommendations received beyond the end of Term 4 will not be considered.

To be eligible, the student must have completed all graduate courses for the MASC degree and must have obtained a minimum 80% average. The supervisory committee must recommend the transfer, in writing, based on demonstrated excellence in research and provide evidence of a complete plan of research for the doctoral degree. A [transfer form](#) must be submitted in time. All applications must be approved by the Faculty of Graduate Studies.

Note: Transfer credits will only be granted at the time of admission, and recommendations must be included with the offer of admission. A maximum of 50% of the Windsor course degree requirements can be approved for transfer credit, excluding internship/practicum, thesis, dissertation, or comprehensive examination courses.

Note: It is vital that both you and your supervisor are 100% certain that transfer from the MASC to PhD is the right decision for you. There are both academic and financial implications of the transfer. Once you have transferred from MASC to PhD program you cannot revert back to the MASC. If you subsequently fail to complete the PhD then you will leave the University with no qualification.

Deadline dates for MASC to PhD transfer: Your course enrollment and academic transcript are termly. If you successfully complete your transfer talk midway through a term, the transfer will not appear until a later date. It is important to note the transfer deadline dates shown in the Table below.

<u>Intended PhD Start Term</u>	<u>Deadline Date for Transfer</u>
Winter	October 1
Summer	February 1
Fall	June 1

7.10. TRANSFER FROM MENG TO MASC PROGRAM

MEng students that wish to transfer to MASC program may contact Graduate Secretary and Graduate Coordinator to discuss the required steps.

The requirements for a transfer from MEng to MASC may include:

- completing four graduate courses in the MEng program before an application is submitted,
- obtaining an average above a minimum acceptable average in these courses,
- applying to the MASC program and meeting all minimum requirements,
- approval of an ECE faculty member to supervise the student.

8. GRADUATE ASSISTANSHIP (GA)

[Graduate Assistantships](#) are unionized and governed by a Collective Agreement (CUPE 4580) and are paid as a salary and considered employment. An email with application instruction is sent out to all graduate students prior to the beginning of each semester. In order to hold a GA position:

- a) you should attend [GATAcademy](#), organized by [Centre for Teaching & Learning](#) (CTL),
- b) you must apply every semester,
- c) you must fully fill ALL forms sent by the Graduate Secretary,
- d) you must be a full-time registered student **AT THE TIME of submitting your GA application**,
- e) you must be in good academic standing,
- f) for international students: you must have a valid Study Permit till end of the semester, and you must have a valid SIN number **AT THE TIME of submitting your GA application**.

Note: “Graduate assistants cannot pick and choose which courses to be assigned to. The departmental commitment is to offer the required terms of support per the GA/TA collective agreement, but departments are not obligated and cannot guarantee that assistants will be supporting the same course each term. Duties and course assignments would depend on the departmental teaching needs and courses offered each semester. When students apply, they are asked on the application form to indicate three course preferences, however, placement in a preferred course choice is not guaranteed.”

9. SCHOLARSHIPS

The following list contains some of the Scholarships and Awards for which graduate students may apply. The values of these Scholarships and awards may change year-on-year.

- a) [ECE scholarships](#)
- b) [Engineering scholarships](#)
- c) [Faculty of Graduate Studies scholarships and forms](#)

- d) External Scholarships – you will be made aware when these scholarships are available, they include OGS, NSERC, TRILLIUM, VANIER

Note: It is essential that you follow the guideline when applying for any scholarship or award.

10. EXTRA CURRICULUM ACTIVITIES AND ADDITIONAL INFO

- a) [Graduate Student Society](#)
- b) [Library](#)
- c) [Lancer Sport and Recreation Centre](#)
- d) [Student Success and Leadership Centre](#)
- e) [Students Award and Financial Aid](#)
- f) [Phase I/II eligibility FAQs including: “Do I need to pay tuition if I am planning to meet Phase I?”](#)
- g) [Important Dates for Graduate Students](#)