

PHD PROGRAM REGULATIONS & POLICIES

Every PhD student registered in the Department of Electrical and Computer Engineering (ECE) will be supervised by a research supervisor, assisted by a committee. Supervisors must be tenured or tenure-track ECE professors. Emeritus professors, Adjunct professors, and Associate members of the ECE Department may not serve as supervisors. A researcher with a PhD in the appropriate field can co-supervise ECE graduate students. The co-supervisor is not required to have an affiliation with McGill and does not have to be a professor. The appointment of a co-supervisor is subject to Departmental approval. The committee, recommended by the supervisor, will be nominated, then approved and monitored by the Associate Chair of the Department.

Procedure for Supervisory Committee Nomination

An email describing the proposed composition of the Committee should be sent by the supervisor to Prof. Odile Liboiron-Ladouceur, Associate Chair, Graduate Program Director (odile.liboiron-ladouceur@mcgill.ca) with a copy to the Graduate Program Coordinator (grad.ece@mcgill.ca). The general research area taken by the student will be described in the email along with the research expertise of each Committee member relevant to the student's research. Upon approval of the committee composition by the Associate Chair, a nomination email will be sent to the proposed members. Once all members have agreed to serve on the committee, a confirmation email will be sent to the supervisor with the committee members and student copied.

Composition of the Supervisory Committee

The Committee will consist of the supervisor and either two or three other members. One of the members should be from an area of research related to but not identical to that of the student. This may be:

- a departmental member from a different research area (as defined on the ECE departmental website <http://www.mcgill.ca/ece/research/>), or
- a member external to the Department.

If possible, one member should be external to the Department.

Role of the Supervisory Committee

The Committee's main responsibilities will be to define the student's courses and Qualifying Examination requirements, to review on a regular basis the student's progress, and to make recommendations to the Associate Chair on matters relating to the student's progress in the doctoral program. The committee must meet with the student at least once per year to review progress. Throughout the program, the student is encouraged to meet with and discuss their research with the Committee members.

Preliminary Supervisory Committee Meeting

A preliminary meeting should take place within three months of the date of entry of the student. The purpose of this meeting is:

- to define the **general** area of the student's research;
- to specify a set of courses to be taken for credit and texts and material to be read independently by the student. The courses specified at this meeting (or at any later date with the agreement of the committee) are intended to equip the student with the background and specialized knowledge appropriate to the student's likely area of research. The courses will be at the 500 and 600 level in the Department of Electrical Engineering, with the possibility of courses at other levels and given in other departments;
- to set the date and contents of the Qualifying Examination.

ECSE 701: PhD Qualifying Examination

- Students must register for this course in the term in which the exam takes place.
- The exam must take place within one year of initial registration in the doctoral program; non-compliance with this rule will result in a failure.

Every PhD student is required to take an oral Qualifying Examination, the purpose of which is to evaluate the background preparation and level of specialized knowledge of the student in her/his area of research. The contents of the Qualifying Examination are to be set at the Preliminary Meeting; they should be chosen from the courses, texts and material specified at that meeting. The examiners at the Qualifying Examination shall include the student's Supervisory Committee together with any other examiners chosen by the committee.

In case of a failure, an assessment and reasons for the failure must be documented in sufficient detail and provided to the student to allow the student to understand the decision of the committee. In the case of a first failure, the grade of HH (continuing) will be issued; the student will be required to pass a second and final qualifying examination within four months; non-compliance with this rule will result in a failure.

Once a student has passed the Qualifying Examination, and the Associate Chair has been informed by the Supervisor, the student will be awarded a PASS grade in the course ECSE 701.

ECSE 702: Research Plan Proposal

- Following the successful completion of ECSE 701, students must register for this course in the term in which the proposal is presented.
- ECSE 702 must be completed within 2 years of initial registration in the doctoral program; non-compliance with this rule will result in a failure.

The student must present a written research proposal to the Supervisory Committee. The proposal, which aims to establish a research topic and its suitability for the PhD degree, should contain the following: 1) a statement of the proposed research, 2) the motivation and research question(s) being addressed in the proposed research, 3) the methodology, 4) results already obtained (if any), 5) expected results, and 6) a timeline. The proposal is to be received by members of the Supervisory Committee in advance of its presentation. The format of the research proposal examination will be a 20-minute oral presentation of the written statement by the student and then a period in which the student will be questioned on the proposal by the Supervisory Committee.

In case of failure, an assessment and reasons for the failure must be documented in sufficient detail and provided to the student to allow the student to understand the decision of the committee. In the case of a first failure, the grade of HH (continuing) will be issued; the student will be required to make a second and final presentation within four months; non-compliance with this rule will result in a failure.

Once the student's written proposal and oral examination have been accepted by the Supervisory Committee, and the Associate Chair has been informed by the supervisor, the student will be awarded a PASS grade in the course ECSE 702.

ECSE 703: PhD Research Seminar

- Following the successful completion of ECSE 702, students must register for this course in the term in which the seminar is presented.
- ECSE-703 must be completed within 3 years of initial registration in the Ph.D. program; non-compliance with this rule will result in a failure.

The research seminar examination will consist of two components:

- The student must first submit a written manuscript, which demonstrates the progress made towards the PhD thesis, for evaluation by the members of the Supervisory Committee.
- This will be followed by a 20-minute oral presentation, in the form of a research seminar, in which the student presents the research work described in the manuscript. The presentation will normally be open to the public.

In case of failure, an assessment and reasons for the failure must be documented in sufficient detail and provided to the student to allow the student to understand the decision of the committee. In the case of a first failure, the grade of HH (continuing) will be issued; the student will be required to make a second and final presentation within four months; non-compliance with this rule will result in a failure.

Once the Supervisory Committee has judged both manuscript and oral presentation satisfactory, and the Associate Chair has been informed by the supervisor, the student will be awarded a PASS grade in the course ECSE 703.

Policy Regarding Failures

A failure is recorded in each of the following cases:

- a grade of less than B- is obtained in a 500- or 600-level course;
- the student is not granted a "PASS" grade at the first or second attempt at ECSE 701, ECSE 702 or ECSE 703;
- any deadline regarding requirements for ECSE 701, ECSE 702 or ECSE 703 is not met: first attempts at ECSE 701, ECSE 702 and ECSE 703 must be held within 1, 2 and 3 years of initial registration respectively; second attempts following a failure in any of these courses must occur within 4 months of the initial failure;
- a Research Progress Tracking Form is unsatisfactory.

The accumulation of 2 failures will result in permanent withdrawal from the PhD program. For example:

- 2 failed courses; or
- 2 unsatisfactory Research Progress Tracking forms (not necessarily consecutive); or
- 2 failed attempts at ECSE 701 or ECSE 702 or ECSE 703; or
- 1 failed course and 1 unsatisfactory Research Progress Tracking form (in different terms).

Mandatory Research Progress Tracking

The supervisor together with the student must complete Research Progress Tracking forms and submit them to the ECE Graduate Programs Office as follows: immediately after the preliminary meeting of the student and the Supervisory Committee, immediately after ECSE 701, ECSE 702 and ECSE 703 examinations and subsequently by May 31st each year. Following an unsatisfactory or conditional report, the subsequent Research Progress Tracking form must be completed no earlier than 4 months and not later than 6 months.

Thesis Submission

- The time limit to complete a PhD degree is 4 years after completing the 3 year residency requirement. For students admitted with a Master's degree from McGill or from another approved institution, the residency requirements will be reduced to two years.
- The Nomination of Examiners and Thesis Submission Form must be submitted at the same time as the thesis.
- The student and the supervisor must agree on the names of Internal and External examiners. The nomination is subject to the approval of the Associate Chair.
- The student, the supervisor and the Associate Chair (Graduate Affairs) must sign the Nomination of Examiners and Thesis Submission Form.
- For more detailed information on Thesis Submission, please refer to the Graduate and Postdoctoral Studies (GPS) website – <http://www.mcgill.ca/gps/thesis/thesis-guidelines>

Final Defence

After the thesis has been evaluated and approved, a final oral examination will be held. The Oral Defence Committee shall be composed as stipulated by GPS regulations – <http://www.mcgill.ca/gps/thesis/thesis-guidelines/oral-defence>

Conferment of the PhD Degree

The doctoral degree will be conferred on students who have met the following requirements;

- Successful completion of the courses prescribed by the Supervisory Committee.
- Passing the Qualifying Examination (Course ECSE 701)
- Approval of the thesis proposal submitted by the student (Course ECSE 702)
- Approval of the Research Seminar presented by the student (Course ECSE 703)
- Passing the oral defense conducted by GPS
- Final electronic submission and approval of the thesis.