# Engineering and Applied Science Graduate Council Manual 

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## PREAMBLE

This document describes (i) the procedures followed by the Engineering and Applied Science Graduate Council to ensure that the Graduate Studies conducted in the Faculty comply with the regulations of the School of Graduate Studies and (ii) those regulations peculiar to the academic needs of this Faculty.
These procedures are intended to be an extension of the General Regulations of the School of Graduate Studies, which are found in the current issue of the Calendar of the School of Graduate Studies and in the Governing Framework for Graduate Studies, April 2009.

## Consequently, the General Regulations of the School take precedence.

The guidelines set out in this Manual will be subject to annual review at the first Council meeting of the academic year. Substantive amendment to these procedures shall fall under Item \# 10. AMENDING FORMULA in Part 1 below.

The following definitions are used in these procedures:
The School: the School of Graduate Studies (SGS).

The Office of the School: the Secretariat which handles the School of Graduate Studies Administration.

The Faculty: The five Engineering Departments (Civil, Chemical, Electrical, Mining and Mechanical) and faculty members of the Departments of Chemistry (M.A.Sc.) Geological Sciences and Geological Engineering, Mathematics and Statistics, and Physics, Engineering Physics and Astronomy, who are involved in the graduate programs assigned to the Faculty of Engineering and Applied Science.

The Engineering and Applied Science Graduate Council (Council): the Graduate Council of the Faculty of Engineering and Applied Science. The Graduate Council includes the five Engineering Departments and the four Departments of Chemistry (M.A.Sc.), Geological Sciences and Geological Engineering, Mathematics and Statistics, and Physics, Engineering Physics and Astronomy.

GSEC: The Graduate Studies Executive Council
The Chair: the Chair of the Engineering and Applied Science Graduate Council or his/her delegate.

The Head: the Head of the Department in the Faculty. The responsibilities may be assumed by a delegate or a Department Committee according to the procedures of the individual Departments.

The Coordinator of Graduate Studies: the Faculty member to whom some or all of the Department responsibilities for graduate studies have been delegated by the Head.

Programs: Some graduate programs in the Faculty involve more than one Department (e.g. Biomedical Engineering) or more than one university (e.g. ADMI).

## PART 1: STRUCTURE, RULES AND PROCEDURES OF THE ENGINEERING AND APPLIED SCIENCE FACULTY GRADUATE COUNCIL

## 1. MEMBERSHIP

The Engineering and Applied Science Graduate Council includes those faculty members of the SGS involved in the graduate programs assigned to the Faculty of Engineering and Applied Science. Meetings of the Graduate Council normally include:

- Graduate coordinators of all graduate departments/ programs within the Faculty (or their delegates)
- Three graduate students representing the graduate students from the Faculty
- The Chair and Associate Chair
- The Associate Dean of the Faculty assigned to Graduate Studies and Research
- The Associate Dean of the SGS assigned to the Faculty
- A Senior Officer of the SGS, normally, the Director of Admissions and Student Services


## 2. STUDENT MEMBERS

Two of the three student members shall come from two of the five engineering Departments, and one shall come from one of the four Departments of Chemistry (M.A.Sc.), Geological Sciences and Geological Engineering, Mathematics and Statistics, and Physics, Engineering Physics and Astronomy. Student members shall be elected according to the procedures described in Appendix 1.

## 3. VOTING MEMBERS AND QUORUM

The graduate coordinators (or their delegates) and the student members are voting members of the Graduate Council for a total of 12 voting members.

For Graduate Council meetings, an attendance of six voting members constitutes a quorum four of which must be faculty members. The Departmental representation is the obligation of the Department.

## 4. CHAIR AND ASSOCIATE CHAIR

The Council shall elect a Chair and Associate Chair. The Chair and Associate Chair are normally elected for a three-year-term.

The Associate Chair may substitute for the Chair in any capacity by mutual agreement. The Associate Chair should handle matters relating to students in the Chair's Department.

The Chair of Graduate Council is a member of the Graduate Studies Executive Council (GSEC) and the SGS Fellowship Committee.

## 5. MEETINGS

All administrative matters pertaining to Council meetings shall be under the auspices of the Faculty of Engineering and Applied Science. Council normally meets once a month during the academic session. Meetings can be called by the Chair of the Council as necessary. Meetings could also be called if six Council members request a meeting. The Council shall determine how many times per year (academic session) the Council shall meet. A memorandum shall be sent to the Council members with the schedule of the meetings for the academic year.

It is the responsibility of the Council or Chair of Council to ensure that any business of the Council that has to be approved by GSEC be reported to that body in a timely fashion using the formats and forms as required by GSEC and according to any GSEC deadlines.

Agenda items should be submitted to the Council's administrative assistant one week before a scheduled meeting. Programs with items on the agenda should ensure that the item has received appropriate discussion within the Program, ensure representation by a spokesperson on the matter, and provide supporting materials for circulation at the meeting.

Bourinot's Rules of Order, in its most recent edition, shall govern the meetings of Council.

## 6. COUNCIL BUSINESS FOR GSEC APPROVAL

The Chair, assisted by appropriate spokespeople if necessary, submits items approved by the Council to GSEC for approval.

These items include:

- Calendar material and course offerings
- Graduate degree program requirements and changes to same
- New graduate degree programs


## 7. ROLES AND RESPONSIBILITIES OF COUNCIL

The design, implementation and oversight of graduate curriculum is a shared responsibility between the SGS, the Graduate Studies Executive Council (GSEC), and the Engineering and Applied Science Graduate Council.

In general terms, Council is responsible for the following:

- graduate courses and graduate degree program requirements, and the related calendar material of their established graduate programs;
- Student matters including "advanced standing", promotion, withdrawal and appeals;
- Establishing and following a clear process for Master's oral thesis examinations;
- Providing an omnibus report to GSEC regarding changes in calendar material and course offerings;
- Recommending to GSEC new programs and modifications to existing programs;
- Other roles and responsibilities as detailed below.

It is the Department's responsibility to ensure that students receive adequate academic counselling with regard to his/her academic program, which must meet the stated calendar requirements.

## 8. COMMITTEES OF THE GRADUATE COUNCIL AND REPRESENTATIVES ON SGS OR UNIVERSITY COMMITTEES

## Fellowship Committees of the Graduate Council

In order to have representatives involved in the adjudication of all annual major external and internal graduate award competitions the following fellowship committees are established:

- The Vanier Canada Graduate Scholarship competition committee
- The NSERC Doctoral Award competition committee
- The NSERC Canada Graduate Scholarship -Master's award competition committee
- The Governor General's Gold Medals/Internal fellowships competition committee.

One person shall also participate in the adjudication of the annual Graduate Dean's Doctoral Field Travel Award competition.

Other awards may be adjudicated as requested by the SGS Fellowship Committee.
A schedule of the annual competitions, the deadlines, the schedule for review activities and for final decisions, is available from the School of Graduate Studies.

Each Engineering Department or Program in the FEASGC shall nominate eligible representatives to be assigned as reviewers to at least one of the Council's committees. The Engineering/Engineering Science programs in Chemistry (M.A.Sc.), Mathematics, Geological Sciences, and Physics, may or may not be required to nominate representatives, depending on the current enrolment of FEAS graduate students in their department. The representatives normally agree to serve a 3-year term on the committee or committees although terms of other lengths are possible. The final composition of all award committee memberships shall be presented to Council for review and approval.

## Fellowship Committee of the SGS

The Chair of Graduate Council is an ex-officio member of this committee. At least one member of any of the above committees shall be required to attend any SGS Fellowship Committee meetings at which the university-level competition decisions are made, as the Chair's delegate. For example, one of the members of Council's NSERC Doctoral Award competition committee shall attend the SGS Fellowship Committee meeting where final selection decisions are made.

## Academic Appeal Board of the SGS

One representative and one alternate from a different Department are elected from the Faculty for a term of two years.

Faculty members serving on the Academic Appeal Board (AAB) shall be nominated by Faculty Graduate Councils or Committees. Student representatives on the AAB shall nominated by Faculty Graduate Councils or Committees or by the Society for Graduate and Professional Students.

Faculty members on the AAB will be elected/appointed for two-year terms, and student members in the AAB will be elected/appointed for one-year terms. Both terms normally commence as of July 1 and are renewable.

## Graduate Faculty Senator

One graduate faculty senator is elected from the faculty for a term of three years.

## Ad Hoc

Ad Hoc committees are established as necessary.

## 9. ELECTIONS

## Nominating Committee

The Nominating Committee shall consist of the Coordinator of Graduate Studies in each of the five engineering Departments and the Chair of Council who will act as Chair of the Committee. It will prepare a slate of nominees for Representatives to the University, SGS and Graduate Council Committees (Senate, SGS Fellowship committee, SGS Academic Appeal Board), and for the Chair and Associate Chair.

## Report of Nominating Committee

The Nominating Committee shall present its slate of nominees to the Council for election by the Council at the next Council meeting. Additional nominations can be brought forward at either meeting with the written approval of the nominee.

If there are more nominees than vacancies an election by secret ballot must be held. The nominee with the highest votes will be elected. In the case of a tie, the Chair of Council may vote.

## 10. AMENDING FORMULA

Amendments and modifications to these Procedures may be proposed by any member of the Council, including ex-officio members, at a Council meeting. All suggested modifications must be referred to an ad hoc committee including the Chair and Associate Chair and two other members of Council elected by Council. After due consideration of the proposals, the committee will report its recommendations to Council. A proposed modification shall be presented to a Council meeting in the form of a motion stating the modification and requesting Council to consider it. The motion shall be treated as a regular motion with regard to seconding, discussing and voting.

Modifications to these Procedures must be approved by two-thirds of the voting members present.

## PART 2: ACADEMIC MATTERS

## 1. CURRICULUM CHANGES AND CURRICULUM DEVELOPMENT

### 1.1. Program requirements, course offerings and calendar material

Departments submit to the Council for approval changes in their SGS calendar material and course offerings. (Guidelines and forms pertaining to changes in the SGS Calendar are available
in the office of the School of Graduate Studies and are included in the appendices here.) Calendar changes approved by the Council are reported to the GSEC for ratification. Changes for an upcoming academic year must be approved no later than the Council meeting preceding the February meeting of GSEC.

### 1.2. New and Modified Programs

The processes for approval of new graduate programs, or major or minor modifications to an existing graduate program, are outlined in detail in the Queen's University Quality Assurance Processes (QUQAPs) document approved by Senate in November 2010, which can be found here:
https://qshare.queensu.ca/Groups/VPA/Quality\ Assurance/QUQAPsFinalApr2811.pdf?ticket=t 30hxGrsb

The templates to be used for the processes can be accessed at: http://www.queensu.ca/provost/responsibilities/qualityassurance/Templates.html
After submission of full Proposal Briefs for new graduate programs to Council for approval, Proposals approved by Council for new graduate programs, or for major or minor modifications to an existing program, are submitted to GSEC for approval and, as appropriate, to the Faculty Dean and Faculty Board for review.

## 2. PROGRAMS

### 2.1 Engineering and Applied Science Graduate Council Requirements for Degrees

### 2.1.1 Graduate Student Funding

Master of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.) students must be funded in at least their first year of studies, following the minimum funding package guidelines of each Department.

### 2.1.2 Course Duration and Weighting

A typical "term length" graduate course runs for one term (normally 4 months) of the academic session and is weighted at 3.0 credit units, half of the "full," or "two term", 6.0 credit unit course. A typical "full" graduate course runs for two terms (normally 8 months).

### 2.1.3 Master's Degree - Master of Applied Science (M.A.Sc.)

The minimum course requirements for this program are four term-length graduate courses or their equivalent. The Council will accept one term length senior ( 400 -series) undergraduate course, OR one combined undergraduate/graduate course (also known as a double numbered $400 / 800$ course) as the equivalent of a graduate course from any discipline for a M.A.Sc. student provided that
a) the course is approved by the student's supervisor and
b) the student has not received credit for a similar course in their Bachelor's program.

### 2.1.4 Master's Degree - Master of Engineering (M. Eng.)

The requirements for this program are 8 term length courses. At least 4 term length courses must be taken from the Department in which the student is registered and be entered as primary on the registration form. A maximum of 2 term length 400 series undergraduate courses or double number 400/800 level courses or a combination thereof may be taken provided that:
a) the courses are approved by the student's supervisor or graduate coordinator and
b) the student has not received credit for similar courses in their Bachelor's program.

When:
a) 2 term-length 400 series undergraduate courses,
b) one 400 series undergraduate and one double number 400/800 graduate level courses, or
c) two double number 400/800 graduate level courses
are taken, the remaining courses must be graduate level courses and must not be combined undergraduate/graduate courses (also known as a double numbered 400/800 graduate level courses).

### 2.1.5 Doctor of Philosophy (Ph.D.)

Beyond the Master's degree course requirement, a Ph.D. student will be required to take a minimum of three term length graduate courses (or equivalent). Individual Departments may require more than three courses. Only 1 course of the required 3 may be a combined undergraduate/graduate course (also known as a double numbered 400/800 course).

For students who received a Master's from the same department at Queen's and in the same area of study, the minimum course requirements shall be decided in consultation with the PhD Advisory Committee and approved by the Department Head or Graduate Coordinator.

### 2.2 Approval of Programs of Study

### 2.2.1 Supervisors and Advisory Committees

(i) The Department shall be responsible for the programs of all M.Eng. students.
(ii) The Department shall appoint a supervisor for each student enrolled in an M.A.Sc. program.
(iii) The Department shall appoint a supervisor and an advisory committee for each Ph.D. student within the first academic term of the student's registration in the program, according to the regulations and procedures in section 2.2.1 a. below. The Advisory Committee is responsible for assessing and reporting the progress of the Ph.D. student.

### 2.2.1 a. Procedures for PhD Advisory Committees and Progress Reports (approved May 2, 2012)

1. Each PhD student must have an Advisory Committee consisting of three faculty members: the supervisor plus two additional faculty members, one of whom could be a co-supervisor. Final authority governing the membership of the Committee rests with the Department Graduate Coordinator, but its members will normally be nominated by the supervisor.
2. The Advisory Committee shall assess a student's progress and provide feedback, on the basis of a written Progress Report. The report must be sent by email to the Graduate Assistant, who in turn will circulate it to members of the committee, and each member of the committee is required to respond with an assessment of "satisfactory" or "unsatisfactory". It is the responsibility of the student to submit the report in a timely fashion to the Graduate Assistant. In the event that an "unsatisfactory" assessment is received from any of the committee members, it is the responsibility of the supervisor to ensure that a Committee meeting is held to review the report and reach a collective decision of "satisfactory" or "unsatisfactory", and submit a copy of the decision to the Graduate Coordinator. More frequent meetings may be convened if requested by the student, the supervisor, or the Graduate Coordinator.
3. In the event that the Advisory Committee assesses the student's progress as unsatisfactory, a memorandum must be submitted to the Graduate Coordinator providing the rationale for the decision, along with recommendations to rectify the situation. The Graduate Coordinator shall, in consultation with the student and the supervisor, decide upon the timing of the next meeting of the Advisory Committee (and submission of the next Progress Report). This meeting must be held within the year, but no earlier than 4 months, from the date of the meeting whose outcome was unsatisfactory. A student will normally be required to withdraw upon receipt of two consecutive unsatisfactory progress assessments.
4. It is the responsibility of the student to communicate to the Advisory Committee any special circumstances that should be considered by the Committee in reaching its assessment.

## Notes:

These procedures are intentionally silent on: 1) format of Progress Report, 2) format of meeting (some departments require a formal oral presentation), 3 ) whether there is more than one report in a given year (some departments require 3 reports per year) and 4) coordination with requirements for Comprehensive Exam. It assumed that these points will be covered by procedures specific to each Department. It is expected that the Supervisory Committee for the Comprehensive will become the Advisory Committee.

The key elements that must be followed by every department are: a) every PhD student must write and submit a progress report, at least once per year, b) Advisory Committee members must sign-off on the report as being "satisfactory" or "unsatisfactory", and must meet with the student in the event of an unsatisfactory assessment from any one member, c) two consecutive unsatisfactory reports from the Advisory Committee are grounds for withdrawal.

### 2.2.2 Advanced Standing for Prior Course work

A. Coursework completed for a graduate credential that is laddered (or stacked) with a higher graduate credential

Courses that are successfully completed as part of a Queen's University Senate -approved Graduate Certificate or Graduate Diploma may be counted toward the coursework requirements of an appropriate higher graduate credential, where the Graduate Certificate or Graduate Diploma has been designed and approved to ladder to a higher level graduate credential. The number of courses for which advanced standing and equivalent credit may be granted, and the minimum final grade requirement(s), if applicable, in the course(s) under consideration, must be consistent with the approved structure and inter-relationship of the two graduate credentials.

PROCEDURE: A written request documenting the case is sent by the Graduate Department or Program to the School of Graduate Studies. Documentation should include a rationale for the request, and the department's/programs verification that the course or courses are eligible to be counted towards a higher-level graduate credential.

If the request is approved the School of Graduate Studies will inform the student, the Department/Program and the Office of the University Registrar (if required). The student's Queen's University transcript may be revised to indicate that some or all of the coursework in the Graduate Certificate or Graduate Diploma has been counted towards the higher-level graduate credential.
B. Individual course(s)

Some students, after admission, may wish to have related courses of appropriate levels credited to their current programs. All such requests are considered on their individual merits. If requested by the Graduate Department or Program and approved by Council, the coursework
requirement for the Queen's graduate degree may be reduced accordingly. The following working rules have been employed:
i. The course was not used for another degree or credential.
ii. The course was not used to obtain admission.
iii. The course does not duplicate the content of another course taken by the student.
iv. The course is equivalent in hours and level to a course of the Queen's program for which it is to substitute.

Requests for Advanced Standing should be made prior to admission, but not later than the end of the first term after admission.

PROCEDURE: A written request documenting the case is sent by the Graduate Department or Program to the Chair of Council c/o the School of Graduate Studies. Documentation should include a rationale for the request, verification that the course or courses are equivalent in depth and breadth to the Queen's graduate course, and course description and/or outlines of the course or courses in question. If the case is evidently straightforward, it may be approved by the Chair/Associate Chair and then must be submitted for approval and action to SGS and also reported back to Council. Otherwise, the request will be placed on the agenda for decision by Council at its next meeting.

If the request is approved the School of Graduate Studies will inform the student, the Department/Program and the Office of the University Registrar (if required). The student's Queen's University transcript may be revised to indicate that a course or courses previously completed has or have been counted towards the current graduate degree.
C. Undergraduate courses completed in a combined Bachelor's/Master's degree program

Graduate courses that are successfully completed as part of a Queen's University Senate approved combined Bachelor's/Master's degree program may be counted toward the coursework requirements of both the Bachelor's degree and the subsequent Master's degree. The number of courses for which advanced standing may be granted, restrictions on including cross-listed courses, and the minimum final grade requirement(s), if applicable, in the course(s) under consideration, must be consistent with the approved structure and policies of the combined Bachelor's/Master's degree program.

PROCEDURE: A written request documenting the case is sent by the Graduate Department or Program to the School of Graduate Studies. Documentation should include a rationale for the request, and the department's/programs verification that the course or courses are eligible to be counted towards the Master's degree.

If the request is approved the School of Graduate Studies will inform the student, the Department/Program and the Office of the University Registrar (if required). The student's Queen's University transcript may be revised to indicate that some of the coursework in the Bachelor's degree has been counted towards the Master's degree.
2.2.3 Direct Entry into a Doctoral Degree Program (see also SGS calendar, Admission and Registration, Academic Qualifications for Admission):

In exceptional cases, applicants who hold an Honours bachelor's degree with an overall "A" average and who demonstrate advanced research ability may be granted direct admission to a doctoral degree program upon written recommendation of the admitting Graduate Department and approval of Council and the SGS. All other procedures for application and acceptance also apply. Students admitted in this way to a doctoral degree program in Engineering and Applied Sciences must complete the coursework requirement stated in 2.1.4 above.

The procedure is as follows. A written request documenting the case is sent by the Department to the Chair of Council. If the case is evidently straightforward, it may be approved by the Chair/Associate Chair and then must be submitted for approval and action to SGS, and also reported back to Council. Otherwise, the request will be placed on the agenda for decision by Council at its next meeting.

NOTE: Students admitted to a doctoral program through direct entry may revert to the master's program within the same department/program in exceptional circumstances and with the approval of the supervisor(s), the department/program and the School of Graduate Studies.

### 2.3 Program Decisions

The Chair acts on behalf of the Council and is accountable to it in specific matters pertaining to students and their programs of study. His/her purview includes action with respect to grades of less than B- in primary courses, on the basis of Department recommendations; approval of credit courses taken at other institutions (advanced standing); changes in program.

After he/she has considered the matter, the School of Graduate Studies shall inform the Department of the Chair's decision. The Chair may refer complex matters to the next meeting of the Council for a decision. The Chair will report decisions requiring regulations to be waived at the next Council meeting.

In the event that the Council or the Department wishes to appeal a decision of the Chair, the matter, together with the grounds for the appeal, will be immediately referred to the Council for further consideration. The Council will re-examine the case and make a decision.

## 3. CHANGE OF DEGREE PROGRAM VIA PROMOTION, OR CHANGE IN MASTER'S DEGREE PATTERNS

### 3.1 Approval of Chair of Council

Changes in degree programs via promotion, or changes from one Master's degree program to another require approval by the Chair.

### 3.2 Promotion from Master's to Ph.D. Program.

Promotion of a student into a Ph.D. program without completing the Master's program is only for exceptional students who show a strong interest in and capacity for pursuing this route. The

Department must make a compelling case for promotion based on the student's demonstrated outstanding academic and research ability. It is important that the best interests of the student are given due consideration.

Promotion into a doctoral program without completing the Master's thesis is reserved for students who meet the following criteria:

1. Must have been registered full time for at least two terms and before completing five terms in a Master's program at Queen's University
2. Must have completed at least two courses towards the Master's degree requirement, or equivalent. For students who have taken less than 2 courses for reasons beyond their control, but are otherwise good candidates for promotion, the final year of undergraduate studies will be taken into consideration. (NOTE: under regulation 2.1.4 above, students promoted to the PhD are required to take a minimum of four term length courses past completion of the B.Sc.).
3. Must have an overall first class average (A-) in graduate courses completed.
4. Should have an undergraduate honours degree with a minimum overall average of B.
5. Must have a documented commitment from the proposed PhD supervisor of financial support, as well as an indication that there is a current Master's project that has the potential to be developed into a PhD research project/dissertation
6. Must meet Departmental criteria for demonstrating promise and ability at research, which must be supported by documentation. Examples of evidence of research ability and/or potential could be:

- publications (conference or journal)
-undergraduate research experience
-letter(s) of support from current supervisor and/or graduate course instructors
The Department shall submit all materials outlining the case for promotion to the Chair of Council for review and decision. Required materials are:

1. All undergraduate and graduate transcripts (photocopies of originals are acceptable)
2. A letter of support from the Department Graduate Coordinator or Department Head
3. A letter from the student to acknowledge that he/she agrees with the proposal to promote him/her.
4. A letter of support from the current research supervisor that addresses the student's outstanding research potential, as well as a statement of expected financial support and evidence that the current Master's project has the potential to be developed into a PhD research project/dissertation.
5. At least one other letter of support from a faculty member other than the current supervisor who has recently taught or supervised the student.
6. An application to the PhD completed and signed by the student. Departments can contact the School of Graduate Studies for a paper application form (the application fee is waived).

NOTE: Students admitted to a doctoral program through promotion may revert to the master's program within the same department/program in exceptional circumstances and with the
approval of the supervisor(s), the department/program and the School of Graduate Studies.

### 3.3 Changes in Master's Degree Patterns.

A recommendation for a change between M. Eng. and research Master's degrees (M.A.Sc.) shall be made by the Head or Graduate Coordinator in a memorandum to the Chair. The memorandum must be countersigned by the student to acknowledge his/her agreement with the proposed change of degree patterns.

## 4. GRADES AND THESES EXAMINATIONS

### 4.1 Submission of Examination Grades.

Grades for all graduate courses in the Faculty of Engineering and Applied Science must be submitted to the Office of the University Registrar via the electronic marks submission process, by the marks deadline date.

### 4.2 Membership and Convening of Thesis Examination Committees.

4.2.1 Membership and Convening of Thesis Examination Committee- Master's students: The supervisor, in consultation with the Head of the Department, shall nominate members for the Master's Examining Committee and propose a date, time and place for the examination. The supervisor must obtain commitments to serve as examiners from those he/ she nominates for the committee. The applicable Departmental form is completed and signed by the supervisor and the Head of the Department.

The composition of the Master's Thesis Examination Committee shall be as follows:

- Chair of Committee: Head of the Department (or Head's delegate)
- Supervisor (s)
- At least one other member of the Department
- At least one other faculty member, who may be:
- from the Department OR
- external to the Department, OR
- in exceptional circumstances, (see note 1. below), external to Queen's University.


## NOTES

1. In the exceptional case, where a faculty member of another Department, with sufficient expertise, cannot be found within Queen's University, a suitable member from another nearby institution may be recommended for the approval of the Dean of the School of Graduate Studies.
2. The Chair of the Master's Thesis examination committee is not a voting member of the committee.
3. In cases where ALL members of the Master's Thesis Examination Committee are internal to the Department, approval of both the Departmental Graduate Coordinator and the Department Head shall be required.

### 4.2.2 Processing Master's Oral Thesis Examinations

1. Student brings list of examiners and tentative date for exam to Graduate Assistant (these have been agreed to by the supervisor).
2. Graduate Assistant confirms room availability, secures the Examining Committee Chair and secures signatures for the Examination Form (the Graduate Assistant can have the student walk the form around for signatures).
3. The student provides a pdf copy of the thesis to the Graduate Assistant for distribution to the Examining Committee; the thesis, the Examination Form and the Examination Report form (referred to in Step 7) are distributed together. This step should be completed 10 working days before the thesis exam date.
4. The examiners do not submit reports on the thesis prior to the oral thesis examination, unless they wish to submit a "negative report"; that is, if it is their opinion that the oral thesis examination should NOT proceed (see \#5 below). If no negative report is submitted, it is presumed that the examiner agrees that the oral thesis examination should be held as scheduled and that they will attend the oral thesis examination.
5. If, on the basis of the thesis submitted for oral examination, any voting committee member feels the examination should NOT proceed, he or she must submit a report which lists some substantive reasons why the thesis should not proceed to examination, no later than 3 working days prior to the scheduled date of the examination. The "negative report" shall be submitted to the Chair of the committee. If only one such negative report is submitted, the oral thesis examination may proceed as scheduled.
6. If two negative reports are submitted, the candidate and the supervisor shall be consulted by the Chair of the Examining Committee or the Graduate Coordinator to see if they wish to proceed with the oral thesis examination. The School of Graduate Studies shall be notified whenever two or more examiners recommend that the thesis oral examination not proceed. The onus is on the candidate to make the decision to proceed or not. If the candidate agrees that the oral thesis examination be postponed, the Chair must convey to the candidate, through the supervisor, the nature of the revisions to the thesis that are advised, and the candidate has the right to present the revised thesis at a later date. At the subsequent submission of the thesis, the oral thesis examination must be held. The School of Graduate Studies shall be informed when an oral thesis examination has been postponed due to two negative reports.
7. After the oral thesis examination, examiners are to submit reports (a standard form shall be provided) on the conduct of the examination to the Head of the Department or the Graduate Coordinator. In particular, any member of the committee who is external to the candidate's home Department shall submit this report.
8. The final version of the thesis should be submitted to School of Graduate Studies for check of format. The student and supervisor( s ) are responsible for the format of the thesis.

### 4.2.3 Remote Participation of Master's students in their Oral Thesis Examination

Normally, the Master's student being examined must be present in person at Queen's University for their oral thesis examination. Exceptions can be made by the Faculty of Engineering and Applied Sciences Graduate Council (FEASGC) or its Chair or Associate Chair for a Master's student to participate in his/her oral thesis examination remotely (e.g., via Skype or similar technology). Exceptions are made on a case by case basis, and only if all the following conditions are met:

1. The department/program must receive a request in writing from the student for this consideration at least 10 business days prior to the date of the examination.
2. The request must be supported by the student's supervisor(s).
3. It must be adequately demonstrated that travel to Queen's for the purpose of the oral thesis examination in person, would cause undue hardship for the Master's student.
4. If the department and supervisor (s) agree, the department is responsible for notifying all members of the oral thesis examining committee including the chair that the student will be participating remotely via Skype (or similar) technology.
5. A request for remote participation in the oral thesis examination will be considered only for students with official "off-campus" status under SGS regulations_
http://www.queensu.ca/calendars/sgsr/Full_Time.html
http://www.queensu.ca/calendars/sgsr/Transfers_from_Full_time_to_Part_time_Status.html $\underline{a}$. Full-Time Off-Campus Status
(Note that normally, students who have been officially granted part- time status are also considered to be off- campus students).
6. The remote locale itself must be approved by the graduate coordinator and could be at a university or similar institution. Someone else (for example a faculty member or a university staff member as proctor) must be in attendance at the remote locale at and for the duration of the oral thesis examination.
7. The department accepts full responsibility for ensuring that the technology will be adequate for and operational throughout, the oral thesis examination (barring any technological malfunctions beyond anyone's control). This will include:
a. verification that there will be sufficient speed and bandwidth of the internet/wireless connection;
b. verification of sufficient testing prior to the examination by people with expertise who will be participating in the examination, both at Queen's and at the remote university location, of the room and equipment to be used;
c. ensuring that the student remains visible at all times during the oral thesis examination proceedings;
d. ensuring that the remote examination room shall be free of outside disturbances (such as noise) during the examination; and,
e. ensuring that a backup connection between the student and the examining committee via teleconference is in place and in good working order.

If the department is not confident in and does not want to take responsibility for the reliability of the remote communication technology, the department has the option of refusing the request for any such examination.

All other regulations of the FEASGC and the School of Graduate Studies (SGS) about the oral thesis examination outcome categories, completion after the oral examination, etc., apply. The full regulation is in the SGS calendar here: http://www.queensu.ca/calendars/sgsr/Thesis.html.

### 4.2.4 Attendance at the Master's oral thesis examination

Attendance at the Master's oral thesis examination of people other than the members of the
examining committee and the student, shall follow the general regulation of the SGS, Attendance at the oral thesis examination http://www.queensu.ca/calendars/sgsr/Thesis.html.), with the exception that requests for permission for "closed" examinations are decided upon by the graduate coordinator or department/program head, not by the Associate Dean of SGS.

The relevant regulation reads as follows:

> Attendance at the oral thesis examination: For the purpose of this Regulation: "Queen's community" includes all faculty, staff, and students of the University; "Visitor" means anyone who is not a member of the Queen's community; and "Supervisor" means the faculty member (or members) designated as the supervisor(s) at the time of the oral thesis examination.

> Oral thesis examinations are normally open, meaning that all members of the Queen's community may attend. Visitors may attend an open oral thesis examination at the invitation of both the candidate and the supervisor(s), which must be made at least one week prior to the scheduled date of the oral thesis examination. The Head of the Department/Program must be informed of any visitors who have been invited to the oral thesis examination. Only members of the Examining Committee may ask questions of the candidate, and only members of the Examining Committee may be present during the preliminary and post-examination sessions.

An oral thesis examination may be closed, meaning that only members of the Examining Committee may be present. An oral thesis examination may be closed for justifiable reasons (such reasons may include the need to protect rights to intellectual property or commercial publication, to honour contractual obligations owed to third parties, or for accommodation requirements). A request for a closed oral thesis examination may be made either by the candidate, or by (any of) the candidate's supervisor(s) to an Associate Dean of the School of Graduate Studies. In the event that either the supervisor(s) or the candidate does not agree to the request for a closed oral thesis examination, the request may nonetheless be granted, unless the dissenting party provides justifiable reasons for not agreeing to a closed oral thesis examination. The decision to grant or deny the request for a closed oral thesis examination shall be made by an Associate Dean of the School of Graduate Studies.
At the time of the oral thesis examination the Chair of the Examining Committee shall have final authority to determine who is eligible to attend the oral examination. Attendance at an open oral thesis examination may be limited due to room capacity.

The Chair of the Examining Committee may ask members of the Queen's community and all visitors to leave the examination after the oral presentation made by the candidate, in cases where a presentation is part of the oral thesis examination processes.
The Chair of the Examining Committee has responsibility for the conduct of the oral thesis examination and has the discretion to exclude members of the Queen's community, and/or visitors, whose conduct disturbs the oral thesis examination processes.

### 4.3 Examination of a M. Eng. Project.

A student undertaking a project course, number 898, in any department is required to submit to the appropriate departmental Graduate Coordinator a written report (typically 30-40 pages) describing the completed project. This report shall be evaluated by at least two suitably qualified
faculty members delegated by the Graduate Coordinator (typically the project supervisor and one other). The final evaluation result will be in the form of a pass or fail grade.
In the event that the result provided by the assigned evaluators is not unanimous or otherwise conclusive, an additional evaluation will be solicited from a suitably qualified faculty member delegated by the Graduate Coordinator.

The Graduate Coordinator (or assistant) shall notify the SGS of the completion of the project course.
4.4 Membership and Convening of Thesis Examination Committee- Doctoral students: Membership and Convening of Thesis Examination Committee for Doctoral students shall follow the General Regulations of the School of Graduate Studies.
The composition of the Committee follows the General Regulations of the School.

## 5. WITHDRAWAL ON ACADEMIC GROUNDS AND APPEALS OF SAME (see SGS

 Calendar, General Regulations, Withdrawal on Academic Grounds)Any academic decision can be appealed by the student under the SGS General Regulation Appeals Against Academic Decisions. This SGS regulation (Withdrawal on Academic Grounds) does not apply to the appeal of an academic decision but rather outlines the procedures whereby a graduate department or program recommends that a student be required to withdraw on academic grounds, and the procedures and responsibilities for deciding on the outcome of this recommendation. Note that a recommendation under a. or b. below, may be appealed by the student under the SGS General Regulation Appeals Against Academic Decisions.

Some Graduate Department/Programs have separate procedures to be followed that would be enacted prior to making a recommendation under the procedures below.

Prior to making a recommendation under the procedures below, the faculty member(s), and/or Graduate Coordinator and/or Graduate Department/Program Head shall meet with the student to discuss their academic situation, the possible recommendation of withdrawal, and the grounds for the recommendation. The student may invite a representative to the meeting. If the student intends to be accompanied by legal counsel, he or she must provide at least 48 hours notice to the department/program/faculty attendees who reserves the right to reschedule the meeting if notice is not given. If the student does not wish to attend the meeting, the student can submit a written statement. If the student does not respond to an invitation to attend the meeting, or does not make a written statement, the process will continue without the student's input.

The student shall be informed in writing when the Graduate Department/Program shall be making a recommendation of withdrawal to the Council and shall be informed of the grounds for the recommendation.

Unsatisfactory performance by the student during the program may cause proceedings to be instituted by the Department requiring the student to withdraw. There are several circumstances which may lead to this request, and, as these differ in certain important respects, the procedures
of appeal and review also differ. The Council has the following responsibilities in each situation:
a. Failure of a Primary Course: In cases when a student does not achieve B-in a primary course, the Head or Graduate Coordinator of the Department may recommend to the Chair of Council that the student:
i. repeat the examination (or equivalent) within one year after the original examination (or equivalent), or
ii. repeat the course, or
iii. take a substitute course. If approved, a student may take another course approved by the Chair of Council to allow them the opportunity to complete the degree requirements.

If such a recommendation is not made or, if made, is not approved by the Council, any student who fails to obtain the required standing in any primary course shall be required to withdraw.

The Council, or its duly empowered Chair or Associate Chair, shall examine the case to see that proper procedures were followed, and if this is ascertained, the Chair of the Council shall notify the SGS, who shall inform the student of the Department's recommendation and the confirmation of the recommendation by the Council. The Council or its duly empowered Chair or Associate Chair, is to limit review to procedural matters and is not to review the academic decision.

If the case is evidently straightforward, it may be approved by the Chair/Associate Chair and then must be submitted for approval and action to SGS (not GSEC), and also reported back to Council. Otherwise, the request will be placed on the agenda for decision by Council at its next meeting.

All such Council decisions are subject to appeal, under the general regulations of the SGS. It is the responsibility of the Chair or Associate Chair of Council to represent Council and explain Council's decision to the SGS Academic Appeal Board, if/as required.
b. The Case of Withdrawal on General Academic Grounds: There are other academic circumstances that could lead to a recommendation that the student be required to withdraw. To cite several examples: in the judgment of the supervisor or a supervisory committee the student may be making unsatisfactory progress in research; the student may have failed the comprehensive examination; there may have been marginal performance in seminars; preliminary drafts of chapters of the thesis may reveal an unsatisfactory standard of scholarship; or in the judgment of the supervisor or a supervisory committee or other Graduate Department academic committee, the student's overall academic performance in coursework is not acceptable. For such cases the Department shall recommend withdrawal to Council and shall inform the student in writing that such a recommendation is being made and the grounds for this recommendation.

The Departmental recommendation shall be taken to a meeting of Council. The Chair of Council shall inform the student that he or she may attend the meeting, with or without a representative, and that he or she is entitled to present the case. If the student intends to be accompanied by legal counsel, he or she must provide at least 48 hours notice to the Chair of Council, who reserves the right to reschedule the discussion of the matter to another meeting of the Council, if notice is not
given. If the student does not wish to attend the meeting of Council, the student can submit a written response to the recommendation, for circulation to the Council and for discussion by the Council at the meeting. If the student does not respond to an invitation to attend the meeting, or does not make a written submission, the process will continue without the student's input.

Review of the Departmental recommendation by the Council is limited to procedural matters and any extenuating circumstances and does not entail an assessment of the academic decision itself.

If the Council approves the recommendation of the Department, the Chair of the Faculty Graduate Council shall report the case to the Dean of the School of Graduate Studies who shall notify the student in writing of the recommendation by the Council. This letter will also inform the student of the relevant appeal procedure under SGS General Regulation Appeals Against Academic Decisions and will inform the student of the academic services provided by the Coordinator of Dispute Resolution Mechanisms and the Society of Graduate and Professional Students' Student Advisors.

All such Council decisions are subject to appeal, under the SGS General Regulation Appeals Against Academic Decisions. It is the responsibility of the Chair or Associate Chair of Council to represent Council and explain the decision to the SGS Academic Appeal Board, if/as required.

The Graduate student representative(s) to Council will not be permitted to attend that portion of a Council meeting at which student matters pertaining to Sections 5a or 5 b are discussed.

## 6. REVIEW OF AN ACADEMIC DECISION

### 6.1 Procedure

Each Department must have available a published procedure for lodging a formal request for a Departmental review of an academic decision.

### 6.2 Appeal

Appeals against decisions made by the Council and/or its committees follow the rules and procedures recommended in Bourinot's Rules of Order (most recent edition), which state the agreement to reconsider a matter already decided requires a $2 / 3$ majority. Furthermore, when it is decided to reconsider a previously ratified decision of Council the only action permitted is referral back to that committee for reconsideration by it.

## Appendix 1: Nomination of Council Student Members

The objectives underlying the method of selecting the three (3) student representatives for the Faculty of Engineering and Applied Science Graduate Council were to:
a) achieve a balanced representation, over a number of years, between the various

Departments in the faculty, as well as Departments outside the faculty that host applied science
graduate programs (Chemistry (M.A.Sc.), Physics, Mathematics and Statistics, Geology)
b) yield candidates that are enthusiastic, conscientious, and responsible advocates for the graduate student body
c) be efficient and punctual during the election process
d) encourage new students to become involved in Faculty governance whenever possible

The student representatives are voting members of the Council, as stated above.
The method is comprised of 4 stages;

1. The Council will call for a student to be nominated from each graduate program, resulting in a maximum of 9 nominees. It is the responsibility of the graduate assistant to inform the Council of the contact information of the nominee, who may be;
a) The SGPS representative for the Department. However, for graduate programs outside of the faculty, this student may not necessarily be in an Engineering and Applied Science program, and therefore would be ineligible for nomination.
b) A representative of a student organization within the Department
c) An individual student who has expressed interest in the nomination.
2. The current student representatives on the Council will form the Nominating Committee. All nominees put forward by the deadline will be called to a meeting at a time and place agreeable to all parties. Each nominee will give a short statement of interest in an informal setting.
3. The Nominating Committee will select 3 representatives using the following guidelines;
a) Only nominees who have attended the meeting described in (2) are eligible, provided they assented to having the meeting at that time and place. If exceptional circumstances prevented their attendance, a statement of interest may be taken separately, and their eligibility will not be invalidated.
b) All other things being equal, the representatives should be from the graduate programs which have not been represented most recently, thereby allowing a rotation to ensure balanced representation.
c) After consideration of (a) and (b), the Nominating Committee will select the nominees who exhibit enthusiasm and dedication that will encourage their attendance and participation in Council activities. Nominees will submit a brief statement of interest to the Council prior to(4).
4. The Nominating Committee will inform the Council as to their selections, to be ratified at the Council meeting by non-members of the Nominating Committee. The Council may ask for justification as to the selections made, and request alternate selections if ratification is not passed. Once ratification is achieved, the new representatives can be informed, and will be permitted to attend Council meetings for a 1-year term.

## Appendix 2

## School of Graduate Studies

NEW GRADUATE COURSE FOR ENGINEERING AND APPLIED SCIENCE GRADUATE COUNCIL APPROVAL

## GRADUATE PROGRAM:

For EACH new course, please complete the entire form.

Insert the proposed Calendar description of the new course in the box below, and delete the example provided. EXAMPLE:
(1a)
(2) (1b)

MGMT 914*/3.0 Field Research in Accounting This seminar focuses on field-based research in accounting. Methodological issues arising from field work will be addressed, and students will gain exposure to a broad cross-section of field research in accounting.

1. Course number (1a) and title (1b): The number chosen for this course should not have been used in the past 5 years. The asterisk * is used to denote a term-length graduate course. NB. Course titles on Queen's transcripts will be truncated if longer than $\mathbf{3 0}$ characters.
2. Weight (e.g. 3.0 credit units [term-length course], 6.0 credit units [full course]): The course weight must be consistent with the course content.
3. Calendar description: This is the description that will appear in the School of Graduate Studies Calendar. The maximum length for a Calendar description is 350 characters (3a). Remember to include any ancillary fees that will be borne by the student (3b). If none, omit.
4. Prerequisites: Please list prerequisites; if none, omit.
5. Exclusions: List courses with sufficient content overlap, not only in your program, but also in other programs. It is the responsibility of the program creating a new course to contact other programs that may offer courses with similar content in order to make this assessment. If none, omit.

Provide the following detailed information for each new course:
6. Expanded Course Description: Attach a detailed course description, expanding on course content. Include potential readings, texts, instructional methods (i.e. lectures, seminars, etc.) and marking scheme. Explain how this course will fit into the Program's overall program requirements. Is this course intended as a requirement, an option or an elective?
7. Impact (if any) on other programs: If the new course will have any impact on programs offered by other Programs, please indicate which programs may be affected by this new course, i.e., the course could be included in another concentration or the course content might
overlap with courses offered by another program. Please indicate which Graduate Program(s) have been contacted.
8. Schedule: Will this course be offered regularly? Annually? In alternate years? When will it first be offered?
9. Staffing: Provide faculty/staff information for the coming year and foreseeable future.
10. Resources: Provide details of specific resource requirements in terms of rooms, equipment, computers, etc.
11. Enrolment: Indicate the anticipated enrolment in this course.
12. Grading basis: Indicate if this course is graded (i.e. assigned a grade) or Pass/Fail.
13. Course component(s): What component(s) make up this course (enter Y for any that apply):

| Lecture |  |
| :--- | :--- |
| Seminar |  |
| Laboratories |  |
| Tutorials |  |

14. Departmental Approval: Provide the date that this course was approved at the Departmental level, if applicable: $\qquad$
15. Submission Contact: Name: $\qquad$
Internal Phone \# $\qquad$
E-mail: $\qquad$
EMAIL the completed form and any attachments to the Engineering and Applied Science Graduate Council administrative assistant.

## FOR OFFICE USE ONLY:

Date of approval by Engineering and Applied Science Graduate Council:
Date of approval at GSEC: $\qquad$

# School of Graduate Studies <br> REVISING AN EXISTING GRADUATE COURSE, FOR ENGINEERING AND APPLIED SCIENCE GRADUATE COUNCIL APPROVAL 

GRADUATE PROGRAM:
For EACH course revision, please complete the entire form.
Insert the EXISTING Calendar description in the box below, and delete the example provided.

MGMT-963* Mathematical Programming
This is a seminar designed to permit students to become familiar with the more advanced topics in mathematical programming. Topics covered will include: Kuhn-Tucker theory, nonlinear programming, network theory, integer programming, and current topics from the literature.

Insert the REVISED Calendar description in the box below, and delete the example provided.

## MGMT-963* Mathematical Programming

This is a seminar designed to permit students to become familiar with the more advanced topics in mathematical programming. Topics covered will include: optimization theory, linear and non-linear programming, network theory, integer programming, and current research topics from the literature.

NOTE: ANY change to the current course NUMBER and/or course WEIGHT, are to be treated as course additions and/or deletions, not revisions.

Revisions made to any of the information noted above must be submitted to the FEASGC for approval. Detail your proposed changes under the following headings and provide a rationale for the changes.

1. Title change: Provide the new title along with the reason for this change (e.g. title does not reflect content, etc.)
NB. Course titles on Queen's transcripts will be truncated if longer than 30 characters.
2. Calendar description change: Provide the new description along with the reason for this change. The maximum length for a Calendar description is 350 characters. Besides revising the current description itself, other descriptors to change might include a change in format (labs replaced by in class demonstrations; the addition of tutorials; lectures changed to
seminars, etc.), or the addition or deletion of an ancillary fee.
3. Prerequisite change: Provide details and reason for the change(s). If this change affects courses listed in other Departments or programs, indicate that the other Department(s) or program(s) have been notified. If none, omit.
4. Exclusion change: Provide details and reason for the change(s). If this change affects courses listed in other Departments or programs, indicate that the other Department(s) or program(s) have been notified. If none, omit.
5. Impact (if any) on other programs: If the revised course will have any impact on programs offered by other Programs, please indicate which programs may be affected by this revised course, i.e., the course could be included in another concentration or the course content might overlap with courses offered by another program. Please indicate which Graduate Program(s) have been contacted.
6. Resources: Provide details of changes in specific resource requirements in terms of staffing, rooms, equipment, computers, etc.
7. Departmental Approval: Provide the date that this course was approved at the Departmental level, if applicable:
8. Submission Contact: Name:

Internal Phone
E-mail:
9. EMAIL the completed form and any attachments to the Engineering and Applied Science Graduate Council administrative assistant.

## FOR OFFICE USE ONLY:

Date of approval by Engineering and Applied Science Graduate Council:
Date of approval at GSEC:

## Appendix 4

## School of Graduate Studies <br> COURSE DELETION FOR ENGINEERING AND APPLIED SCIENCE GRADUATE COUNCIL APPROVAL

## GRADUATE DEPARTMENT NAME:

## COURSE CODE/NUMBER:

** For EACH course deletion, please complete the section above AND items 1 through 3.

1. Course number and title: Note that this number may not be reused for five years.
2. Reason for deletion: Provide a detailed rationale for this deletion, e.g. staffing, resources, archaism, replacement by new course(s), etc.
3. Impact: How will this deletion affect the Program? Will this deletion have any impact on programs offered by other Graduate Programs? If so, please indicate which Program(s) have been contacted and include copies of relevant correspondence.

Submission Contact Name:
Number:
E-mail:
Date:

Signature of Department Head:
Signature of Graduate Coordinator:
EMAIL the completed form and any attachments to the Engineering and Applied Science Graduate Council administrative assistant:

FOR OFFICE USE ONLY:
Date of approval by Engineering and Applied Science Graduate Council:
Date of approval at GSEC:

# GRADUATE DEGREE PLAN REVISION FOR FACULTY OF ENGINEERING AND APPLIED SCIENCE GRADUATE COUNCIL APPROVAL 

## GRADUATE DEPARTMENT NAME:

## DEGREE PLAN:

Degree plan revisions should be submitted whenever a course addition, course deletion or course revision affects the graduate degree program requirements OR whenever a minor change to the current degree program requirements is proposed.

1. Description of Change: Indicate the degree plan and/or SGS Calendar section to be revised
2. Rationale: Provide a detailed justification explaining the proposed change(s).
3. Calendar copy: This is the text that will appear in the SGS Calendar. Provide the revised text with revisions in bold
4. Timing: Please provide dates when these changes will come into effect. Describe how you will ensure that students who began their plans before this change will be allowed to continue in their plans (grandparenting arrangements).
5. Impact (if any) on other Departments: If the revised degree plan will have any impact on degree plans offered by other Departments, please indicate which plans may be affected by this revision. Please indicate which Graduate Program(s) have been contacted.
6. Resources: If these changes will affect specific resource requirements in terms of rooms, equipment, computers, TAs, etc., please provide details. Will any new funds be required for these changes? If so, how will these costs be covered? Please include any relevant correspondence.

Submission Contact Name:

Phone \#:

Email:

Date:
Signature of Department Head/Program Director: $\qquad$

Signature of Coordinator of Graduate Studies:
EMAIL the completed form and any attachments to the Engineering and Applied Science Graduate Council administrative assistant:

## FOR OFFICE USE ONLY:

Date of approval by FEASGC:
Date of approval at GSEC:

