



Graduate Student Handbook

2024-2025

Department of Mining and Materials Engineering

McGill University

Materials Engineering Graduate Programs

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FOREWORD

The Graduate Studies Committee (GSC) of the Department of Mining and Materials Engineering has produced and regularly updates this handbook. It contains information specific to the graduate programs of study offered by the Department. It is important for all graduate students to familiarize themselves with the information in this handbook upon entering the program and abide by the regulations governing their specific program of study. They must also consult the university calendar on regulations and guidelines of the Office of Graduate and Post-Doctoral Studies (GPS) by visiting GPS's website: www.mcgill.ca/gps/policies.

While sections 1 to 3 are the same for the Mining and the Materials Engineering program, *from section 4, the handbooks relative to the two programs differ*, so students must consult either the Mining version or the Materials version of this handbook.

This version refers to the Materials Engineering programs specifically.

All enquiries regarding the programs of graduate studies should be addressed to Ms. Barbara Hanley, Graduate Studies Coordinator, whose coordinates are listed below.

The membership of the Departmental Graduate Studies Committee (GSC) for 2024-2025 is as follows:

Professor M. Cerruti, Graduate Program Director (GPD) and Chair of the GSC
Professor K. Bevan (Materials), Professor G.P. Demopoulos (Materials), Professor R. Gauvin (Materials), Professor R. Guthrie (Materials), Professor F. Hassani (Mining), Professor J. Lee (Materials), Professor N. Quitoriano (Materials), Justin Paris (Materials student rep) and TBA (Mining student rep).

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic or research dishonest offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity for more information).

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GENERAL INFORMATION

The general university regulations governing graduate studies at McGill can be found at:

https://www.mcgill.ca/study/2024-2025/university_regulations_and_resources/graduate/gps_gi_regulations

Students should regularly consult and abide by the University procedures as outlined in:

https://www.mcgill.ca/study/2024-2025/files/study.2024-2025/2024-2025_graduate_regulations_and_resources_2nd_edition_0.pdf

The present booklet outlines the academic regulations specific to the graduate degrees in Mining and Materials Engineering.

All announcements and related organization for both the mining and materials engineering programs are coordinated and arranged by the Graduate Studies Coordinator of the Department.

1. PROGRAMS OFFERED

The Department offers the following graduate degree programs to qualified engineers and scientists:

Mining Engineering:

1. Master of Engineering (M.Eng.) Mining Engineering (Non-Thesis) (45 credits) – Project Option
2. Master of Engineering (M.Eng.) Mining Engineering (Non-Thesis): Environmental Engineering (45 credits)
3. Master of Science (M.Sc.) Mining Engineering (Thesis) (45 credits)
4. Doctor of Philosophy (Ph.D.) Mining Engineering
5. Graduate Diploma (Gr. Dip.) Mining Engineering (30 credits)

Materials Engineering:

1. Master of Engineering (M.Eng.) Materials Engineering (Non-Thesis) (45 credits) – Project Option
2. Master of Engineering (M.Eng.) Materials Engineering (Non-Thesis): Environmental Engineering (45 credits)
3. Master of Science (M.Sc.) Materials Engineering (Thesis) (45 credits)
4. Doctor of Philosophy (Ph.D.) Materials Engineering

2. ADMISSION REQUIREMENTS

2.1 Language Requirements

All non-Canadian applicants seeking admission to the graduate degree programs are required to fulfill the following language requirements.

- a) Non-Canadian applicants (including permanent residents) whose mother tongue is neither English nor French and/or who hold degrees from universities where the teaching is not done in either English or French are required to take a TOEFL (Test of English as a Foreign Language) and pass it with a minimum score of 86 overall, with no less than 20 in each of the four component scores (Internet-based) or an International English Language Testing System (IELTS) and obtain a minimum overall band of 6.5. Applications will not be considered if the TOEFL or IELTS score is not available.
- b) Newly admitted students whose mother tongue is neither English nor French and/or who hold degrees from universities where the teaching is not done in either English or French are strongly advised to take one or more English language courses offered specifically to graduate students. The GSC believes that mastering English is an essential attribute for a successful research career.

2.2 M.Sc. (Thesis) and M.Eng. (Project)

Prospective graduate students who want to pursue M.Eng. (Project) or M.Sc. (Thesis) degrees in Mining Engineering or Materials Engineering must satisfy the following minimum requirements:

- a) Applicants should be graduates of a recognized university and hold a B.Eng., B.Sc. Applied or B.Sc. degree equivalent to the respective McGill degree. Degrees in mining/mineral, metallurgical/materials engineering, other relevant sciences (e.g., geology, physics, chemistry, mathematics, or computer science) and other engineering disciplines such as chemical, civil, mechanical or electrical engineering are eligible for admission.
- b) Applicants must show evidence of suitable [academic achievement](#): a minimum standing equivalent to a Cumulative Grade Point Average (CGPA) of 3.0 out of a 4.0 for all years of the undergraduate program, or a GPA of 3.2 out of 4.0 for the last 2 full-time academic years. In special cases candidates with a CGPA less than 3.0 but above 2.7 may be recommended for admission by the GSC if they produce strong evidence of research or professional achievement and receive a strong and justified endorsement from a willing professor to supervise their studies. Such recommendations for admission may be conditional on the student completing successfully a prescribed full course-load term, as a Qualifying, or Special, student.

2.3 Ph.D. Degree

Prospective graduate students who wish to pursue a Ph.D. degree in Mining Engineering or Materials Engineering must satisfy the following minimum requirements:

- a) A minimum [academic standing](#) equivalent to a Cumulative Grade Point Average (CGPA) of 3.2 out of a 4.0 in a Master's degree program (M.Eng. or M.Sc.) in addition to a CGPA of 3.0 out of 4.0 in the undergraduate program.
- b) Applicants should hold an M.Eng. degree or equivalent from a recognized university. Most applicants holding M.Eng. (thesis), M.Sc. (thesis) and M.Sc. Applied (thesis) degrees will be accepted into Ph.D. 2.
- c) Applicants holding a non-thesis M.Eng. or M.Sc. degree or equivalent whose academic/research background in mining/mineral/metallurgical/materials/process engineering that is perceived to be insufficient in any way, may be admitted into Ph.D. 2 under conditions set by the GSC.
- d) (Fast Track Ph.D. 2 entrance): M.Sc. students, who perform at a level commensurate to the Ph.D. level, may apply in writing to the Graduate Studies Committee for promotion from the Master's to the Ph.D. program without submission of a thesis. For the application to be considered, the following criteria are required:

- No more than 12 months of study in the Master's program has elapsed.
- A minimum CGPA of 3.3 for the last two full-time undergraduate years.
- At least three graduate courses, of which two are lecture-type courses, have already been taken with a minimum CGPA of 3.6.
- At least one seminar presentation has been given (course MIME 673 for Mining, or MIME 670 for Materials), rated at A- (80%) minimum grade.
- Strong letter of recommendation from the thesis supervisor, that describes the student's research achievements and potential.

If the application is approved, the Graduate Studies Committee will inform the candidate to prepare for the Preliminary Oral Examination to be scheduled sometime before, or during, the first semester of the Ph.D. 2 program. If the candidate fails the Preliminary Oral Examination, he/she will be permitted to complete the Master's degree and can then apply for the regular Ph.D. program.

- e) (Direct Ph.D. 1 entrance): B.Eng./B.Sc. students applying directly to the Ph.D. Program (Ph.D. 1) must have a minimum CGPA of 3.7 and provide direct evidence of research experience during their undergraduate degree.

3. MILESTONES

3.1. Introduction

In addition to the required coursework described in detail in sections 4 and 5 below, each graduate student must complete a series of milestones as required by GPS. These can be seen in the MyProgress portal (<https://www.mcgill.ca/gps/myprogress/students-and-supervisors>). They include:

- Letter of understanding: to be completed within the 1st term, following a discussion with your supervisor on modes of communication, supervision, etc.
- Study plan: will be checked off when you participate in the graduate student orientation.
- Supervisory committee member: you will be assigned a supervisory committee member that is a professor in the MIME department, in addition to your main supervisor and co-supervisor, if you have one. The role of the Supervisory committee member as representative of the department is to attend the annual progress review meeting where the progress tracking is documented (see below), and to take part throughout the required thesis examinations.
- Individual development plan: you will have to complete this by your second year. For more information, please refer to <https://www.mcgill.ca/mypath/about-idp/what-idp>
- Progress tracking forms: each year, by November 30th, you are required to submit a progress tracking form. More detail below.
- For PhD students only: preliminary and comprehensive examinations. More details on this in section 5.

3.2 *GPS progress tracking forms and departmental progress tracking*

Research progress tracking is a mandatory McGill policy;
(<http://www.mcgill.ca/gps/students/research-tracking>).

- a) Each year, in October-November, every student must fill out the applicable sections of the GPS-required research progress tracking form, then seek their supervisor's approval, and finally schedule a meeting with their supervisor(s) and the supervisory committee member to review the form. In Year 1, only the Objectives section must be filled out. In all other years, both the Objectives and the Progress sections must be filled out.

After discussion and agreement with the stated objectives and progress, the supervisor(s) will fill out the evaluation and comment section, and students, supervisor(s) and the committee member, will sign the form.

- b) The student must upload the signed progress tracking form on MyProgress, under the milestone corresponding to their year, by November 30th of each year of study.
- c) In case of a disagreement between supervisor(s) and student, a meeting is called by the Graduate Program Director to arrive at a mutually agreed set of objectives. In case this fails, then the student must write a statement detailing their objections to the expectations/objectives set by the supervisor(s) and submit this information along with the form, to the Graduate Program Director who will seek to resolve the differences between the student and their supervisor(s).
- d) If the research progress is unsatisfactory, a new set of interim objectives should be developed for the student at a special meeting called by the GPD and recorded on a new form. These new, or interim, objectives apply only to the next semester. Evaluation of progress should take place after that semester has concluded, through another supervisory committee meeting, and a new progress tracking form should be filled out and uploaded on myProgress.
- e) In the event that a student has any two unsatisfactory evaluations, they may be required to withdraw from their program of study. These two unsatisfactory evaluations need not be consecutive.
- f) In addition to the McGill GPS research progress form, by November 30th each year, students will submit a departmental annual progress report to the Graduate Program Coordinator, via email. The form relative to this report will be sent via email by the Graduate Program Coordinator. This form is used to decide departmental awards; students not submitting a report will be excluded from consideration for such awards. Timely submission of the report and the achievements reported therein are considered in handing out research scholarships by the department.

4. MASTER'S DEGREE REQUIREMENTS - MATERIALS

4.1 M.Sc. (Thesis):

The M.Sc. degree is a thesis program offered to those who have a B.Eng. or B.Sc. degree with minimum admission requirements as described above. The basic degree requirements consist of:

- ✓ Required coursework
 - ✓ laboratory safety course
 - ✓ 3 graduate level courses
 - ✓ Foundation course
- ✓ Thesis research credits and a seminar course

More details on each of these items is provided below.

- ✓ Completion of a thesis.

A master's degree thesis should show familiarity with previous work; demonstrate the ability to carry out, organize, and present research in a professional manner; original research is not necessary. The thesis can be structured as a monograph (traditional form) of typically around 80-100 pages, or as journal-based, manuscript(s) (1-2 articles). For more details refer to <http://www.mcgill.ca/gps/thesis>

Required Coursework

- a) The normal course load for students admitted to the M.Sc. program is four graduate courses (3 graduate-level courses + 1 foundation course). Among the four courses, at least two courses offered in the MIME department should be taken (special cases should be discussed with the Graduate Program Director (GPD) and approved by the GPD. Only one course can be a non-lecture-based literature review course (e.g. MIME 661). Courses are selected in consultation with the respective supervisor(s). No undergraduate course can be substituted for a graduate-level course, nor are continuing education courses eligible for credit. Students may be required to take courses beyond the normal course requirements if this is deemed necessary for the advancement of the candidate's research training and preparation. Students should discuss these extra course requirements with their supervisor(s) upon admission into the program. The maximum number of courses (not counting courses taken during a qualifying term (item (b))) is limited to six (6) one-term graduate courses, unless the formal request from both supervisor and graduate student is approved by the GPD.
- b) Students admitted into the M.Sc. program and whose academic background is not in mining/mineral/metallurgical/materials/process engineering may be required to take 2 one-term undergraduate courses in addition to the 4 graduate courses (item (a)). These courses are chosen in consultation with the thesis supervisor(s). In certain cases, a qualifying term, or year, may be required.

c) All M.Sc. students must register for the Engineering Laboratory Practice course (MIME 601) in their first semester. This course is mandatory to access departmental laboratories and is a degree requirement.

d) Thesis Research Courses:

All M.Sc. students must register for 27 credits of thesis research courses, and a 6-credit seminar course in addition to the courses stipulated in 3.1.a). The student should register for these courses in each semester. It is not done automatically. MIME 690-695 are thesis research courses.

e) Summary of recommended course registration:

Semester 1	Semester 2	Semester 3
2 graduate courses	1 graduate course	MIME 694
MIME 610 Foundation spanned course	MIME 610 Foundation spanned course	
MIME 690	MIME 692	MIME 695
MIME 691	MIME 693	MIME 670
MIME 601		
Total Credits = 15	Total credits = 15	Total credits = 15

Students are required to confirm their registration for every semester (Fall and Winter) during their degree. Please find more information [here](#).

f) Seminar Courses:

All Materials M.Eng./M.Sc. students are required to register for course MIME 670 and give a poster presentation on their proposed thesis research topic at the end of the first semester of entry into the program. This is to be followed by a seminar on their research work, during their third semester (see Appendix D for more details). Seminar presentations are scheduled and announced at the beginning of each term. Changes to the seminar schedule will be made only if the student requesting the change can provide well justified reasons at the beginning of the term. Students are required to send to the GPC an abstract of their seminar and CV/resume, at the latest a week before their seminar, and a filled out form including take-home message and supporting concepts no later than on the Wednesday before their seminar. Failure to do so implies receiving no marks for this part of the examination. See details in Appendix D. Students are expected to register in MIME670 during their third semester.

Thesis Requirement

a) Thesis Supervision

Upon admission, each student will have a designated thesis supervisor from the academic staff of the department. It is important that students consult with their supervisor on a regular basis. As soon as possible after starting the program, but not later than the end of the first term, students should develop a research topic and research plan that is assigned or approved by their supervisor. Students are expected to: inform themselves of program requirements and deadlines; to work within these deadlines; to communicate regularly with their supervisor and to submit progress reports, including the annual progress tracking forms as discussed in Section 3.

In case of significant conflicts between student and supervisor, the student may request a change of supervisor. Appendix B provides procedures for supervisor/student conflicts and change of supervisor requests.

b) Thesis Submission

The student is consulted by the thesis supervisor on the selection of the external examiner. The supervisor ensures the proposed examiner agrees to act as examiner. The student and the supervisor should then complete all steps for the online thesis submission and evaluation as per Thesis Office guidelines found here:

<https://www.mcgill.ca/gps/thesis/thesis-guidelines/initial-submission/next-steps-masters>

Student must make sure to upload the thesis submission checklist at the same time with the initial thesis uploading. There is no oral defense for an M.Sc. thesis.

c) Time Limitation

University regulations stipulate that the time limit to complete a master's degree is 3 years at full-time status and 5 years at part-time status. M.Eng./M.Sc. students in the beginning of their third year will be asked to specify when, and how, they expect to complete their programs within the remaining time. No extension is given after the specified term, and students must withdraw from the program. But re-admission for students may be allowed upon providing proof of the completion of their thesis for submission to the Thesis Office.

4.2 M.Eng. (Project) including the M.Eng. Environmental Engineering Option

Course Registration

The M.Eng. (Project) program consists of 45 credits of course work, seminars, and projects. The package of courses undertaken is intended to provide basic training and will be selected in consultation with the candidate to satisfy their desired specialization. Industrial experience is favorably viewed for entrance into the program but is not considered a necessity. The program consists of a minimum of 12 credits of departmental graduate-level

courses, 6 to 15 credits of M.Eng. Materials project courses, the Materials Engineering Seminar (MIME 670) and enough additional courses (500 level or higher) chosen from within or outside the Department to complete the 45-credit requirement. Students must also take the Engineering Laboratory Practice course (MIME 601) in their first semester. This course is mandatory to access departmental laboratories and is a degree requirement. Materials Engineering students must also take the M.Eng. Foundation Course (MIME 610). The program is established in consultation with the student's advisor. The external courses and project courses undertaken in an industrial environment are subject to departmental approval. Continuing Studies courses are not eligible graduate courses.

Courses for M.Eng. Environmental Engineering Option

This [program](#) is offered by the Faculty of Engineering through the Department of Civil Engineering. Students registered in our Department can take this program by completing the following requirements:

Engineering Laboratory Practice course MIME 601 (P/F).

Required course work (6 credits in total):

CIVE 615 (3 cr) and CHEE 591 (3 cr)

Seminar (6 credits in total):

MIME 670 (6 cr) or MIME 673 (6 cr)

Electives (12-21 credits in total) including:

Six credits from List B and six credits from List C; each course should be from a different department. These course lists can be viewed at: <http://www.mcgill.ca/civil/grad#ENVIRONMENT>

Project (6-15 credits) from the following list:

Mining	Materials
MIME 628 (6 cr)	MIME 680 (6 cr)
MIME 629 (6 cr)	MIME 681 (6 cr)
MIME 634 (3 cr)	MIME 682 (3 cr)

4.3 Residence requirement

The minimum residence requirement for McGill's master's thesis programs is 3 full-time terms. Non-thesis option residence requirements are fulfilled when students complete all course requirements for the program and pay the fees accordingly. Students may find more information on residency requirements here: https://www.mcgill.ca/study/2024-2025/university_regulations_and_resources/graduate/gps_gi_program_reqs

5. Ph.D. DEGREE REQUIREMENTS - MATERIALS

Students that enter their Ph.D. program after having completed a master's degree in a relevant discipline will be admitted as PhD2 students. For them, the Ph.D. program requirements consist of:

5.1 Required coursework

- Laboratory safety course
- Two graduate-level courses, with at least one lecture-based
 - Foundation course

5.2 Preliminary oral exam (thesis research proposal)

5.3 Comprehensive exam

5.4 Seminar course

5.5 Completion of a thesis

A Ph.D. thesis should show familiarity with previous work; demonstrate the ability to carry out, organize and present research / scholarship in a professional manner; display original research / scholarship; and make an original contribution to knowledge. The thesis can be structured as a monograph (traditional form) of typically up to 200 pages or as a journal manuscript, based on 2 or more articles. For more details, refer to the Thesis Office guidelines: <http://www.mcgill.ca/gps/thesis>

Students entering their PhD directly after an undergraduate degree (called “PhD1 students”) or fast-tracking from a master’s program, are required to take extra graduate-level courses, as detailed below. However, requirements concerning the thesis proposal, the comprehensive, the seminar courses, and the completion of a thesis, are the same as for PhD2 level students.

Required Coursework

a) Compulsory course registration follow:

Semester 1	Confirm Registration MIME 601 Engineering Laboratory Practice MIME 710D1 Ph.D. Foundation Course Plus, graduate-level courses assigned
Semester 2	Confirm Registration MIME 710D2 Ph.D. Foundation Course Plus, graduate-level courses assigned
May (for PhD 2 starting in Fall) or Nov (for PhD 2 starting in Winter or PhD 1 students starting in Fall).	Preliminary Examination MIME 701 Ph.D. Thesis Research Proposal
Semester 3	Confirm Registration
Semester 4	Confirm Registration MIME 703 Ph.D. Comprehensive Exam
Semester 5	Confirm Registration
Semester 6	Confirm Registration MIME 771 Research Seminar 2

Semester 7	Confirm Registration Earliest possible submission of thesis
Semester 8	Confirm Registration Earliest time for thesis defense

Students are required to confirm their registration for every semester (Fall and Winter) during the course of their degree. Please find more information [here](#).

The minimum course load for students admitted to Ph.D. 2 is two one-semester graduate courses (500 level or higher) and one MIME 710 Foundation Course. Of the two courses, at least one course offered in the MIME department should be taken (special cases should be discussed with and approved by the GPD). Courses are selected in consultation with the supervisor. A student is normally required to take at least one lecture-type graduate course out of the two required courses; a maximum of one literature review course (e.g. MIME 661) is allowed. Students may have to take courses beyond the normal course requirements if this is deemed necessary for the advancement of the student's research training. The maximum number of courses is limited to four (4) one-term, graduate courses, unless a formal request from both supervisor and graduate student is approved by the GPD.

All Ph.D. students must register for the Engineering Laboratory Practice course (MIME 601) in their first semester. This course is mandatory to access departmental laboratories and is a degree requirement.

Students admitted directly to the Ph.D. program (Ph.D. 1) from their bachelor's program or Fast Track Ph.D. program (Ph.D. 2) directly from their master's program, are required to take four one-semester graduate courses (500 level or higher). These must include the Foundation course MIME 710 and may include, at most, one literature review course. For Fast Track Ph.D. program students, the courses taken during their master's program prior to Fast Track admission are counted as part of the course requirement. Courses are selected in consultation with the thesis supervisor. Students may be required to take courses beyond the normal four course requirement, if this is deemed necessary for the advancement of the student's research training. At least two graduate level courses should be taken from the MIME department except for special cases to be discussed and approved by the GPD. However, the maximum number of courses is six (6), unless a formal request from both supervisor and graduate student is approved by the GPD.

b) Ph.D. Preliminary Oral Examination

(MIME 701 Thesis Research Proposal): Within a year (refer to explanatory note* at the end of the section) of registering, a Ph.D. student is required to present their research program to an examination committee, and describe the results obtained up to then together with plans to complete the research. They should be prepared to talk knowledgeably about the research subject area. Prior to this examination, the student must have passed at least one graduate course. Prior to the examination, the student should prepare a report (refer to Appendix A for preparation guidelines) of no more than 25 pages including diagrams etc. (1-inch margins, 1 ½-spaced, 12-point font size). The report should be approved by the thesis supervisor(s) and then distributed to the members of the examination committee at

least two weeks prior to the oral examination. The examination consists of a 20–25 minute presentation, followed by questions from the members of the committee on the proposed thesis topic, together with questions of a more general background associated with the student's area of research. The presentation is open to all departmental staff and graduate students. The oral examination following the open presentation and question period is a closed-door session. The evaluation forms for the preliminary oral examination are provided in Appendix B.

In consultation with the student's supervisor(s), the Graduate Program Director or delegate will convene an examining committee of normally four members. The committee will include the supervisor, one committee member, one examiner (professors from other departments can be invited) familiar with the research subject, and a fourth member-examiner to act as the Chair of the examining committee. The committee for the students entered through the Direct Ph.D. program and the Fast Track Ph.D. program is composed of five examiners, including the supervisor, the chair of the examining committee, one examiner, the Chair of the Department, and the GPD.

Before the examination starts, the Committee goes *in camera* session and reviews the student's file. During the examination, the supervisor and co-supervisor will ask questions if necessary, at the end of each round of questions from other committee members. After the examination, the committee goes into a closed-door discussion and a decision is made. All committee members, including the supervisor and co-supervisor, vote on an outcome, which will be decided upon by majority vote.

There are five possible outcomes from this examination: (a) the candidate passed the examination; (b) the candidate did not pass the examination and has to repeat the whole exam (i.e. resubmit document, and repeat oral examination); (c) the candidate's report was deemed sufficient, but they failed the oral examination, and thus have to repeat it; (d) the examination was passed, but the report was not of sufficient quality and needs to be resubmitted; (e) the candidate failed the exam. In case of outcomes b-d, the candidate needs to repeat the exam and/or resubmit the report no later than six months after their first exam. Exceptions due to extenuating circumstances need to be discussed with the GPD. In case of a failure outcome (after the first attempt or a re-run), the student will have to withdraw from the PhD program and upon a recommendation of the examination committee, the Graduate Program Director might allow the student to change their registration status to M.Sc., if appropriate. Important note: if a student is asked to backtrack to an M.Sc. this constitutes a terminal degree. The student will not be able to register for PhD in Materials Engineering after completion of the M.Sc. degree.

The Chair of the examination committee will verbally inform the student of the outcome of the examination. A formal written report summarizing the committee's ruling and comments/recommendations will be prepared by its Chair and forwarded to the candidate by the Graduate Program Coordinator; it will be placed in the student's file along with the Ph.D. Oral Exam Document.

* Notes on scheduling:

- A Normal Ph.D. 2 student: Preliminary exams are typically scheduled in two exam periods one in late May and the other in early November, depending on the level and term of first registration. Thus, those who started their studies at the Ph.D. 2 level in either May or September, are normally required to take the exam during the May exam period of the following year. On the other hand, those who started their studies in January are required to take the exam during the November exam period of the same year.
- A Fast Track Ph.D. program entrance student Ph.D. 2: If the application is approved, the Graduate Studies Committee will inform the candidate to prepare for the Preliminary Oral Examination sometime before the first semester of Ph.D. 2 program. Five examination members are required including the committee Chair and supervisor. Typically, GPD or Associate GPD can be the Chair of this committee.
- A Direct Ph.D. program entrance student Ph.D.1: students who were admitted at the Ph.D. 1 level or who are required to take a minimum of four courses will take the Preliminary Ph.D. Oral Exam during the second exam period. Thus, those who started in September take their exam in November of the following year while those who started in January take their exam in May of the following year. Five examination members are required, including the committee Chair and supervisor(s). Typically, the GPD or an Associate GPD, can be the Chair of this committee.

c) Ph.D. Comprehensive Examination

The Comprehensive examination will be in the format of a senior undergraduate-level lecture of 40 minutes covering one topic related to their Ph.D. program and assigned to them by their Preliminary Exam Committee. Starting from Winter 2025, students are required to submit a title, a 100-word abstract, and between two and five references for their comprehensive lecture, to allow the examining committee members the opportunity to properly prepare themselves prior to the comprehensive examination.

The 40-minute presentation will be followed by a 1-hour Q&A session. The student is expected to demonstrate an understanding/command of relevant theoretical fundamentals, together with an ability to clearly explain the scientific concepts underpinning this topic. They will also have to explain how these concepts relate to their research. The student will likely be invited to respond to questions that include the relevance of the topic covered to their PhD research, by using the white-board or any other media devices, to explain/support their thoughts, equations, or concepts.

This will be an in-person exam. The committee will fill in an evaluation form during the in-camera session, post-examination. The evaluation form is provided in Appendix C. The evaluation sheet, student transcript, and the Preliminary Oral comments will be sent to your committee under separate cover.

During the examination, the supervisor and co-supervisor will ask questions if necessary, at the end of each round of questions from other committee members.

After the examination, all committee members, including the supervisor and co-supervisor, vote on an outcome, which will be decided upon by majority vote. Possible outcomes of this exam are Pass, Fail (Rerun), or Fail. The Fail (Rerun) option should be used if the student does not pass the exam at their first attempt; they will be given the possibility to retake the exam within a maximum delay of 3 months from the date of the first exam. Exceptions due to extenuating circumstances need to be discussed with the GPD. The Fail option should be used if a student has already failed the exam once and is retaking the exam, and fails at the second attempt too. In this case, the student might be asked to backtrack to an M.Sc. degree, or to withdraw from the program. Important note: if a student is asked to backtrack to M.Sc., this constitutes a terminal degree. The student will not be able to register for the PhD degree after completion of the M.Sc. degree.

d) Ph.D. Seminar:

All Ph.D. students are required to give a seminar and complete their respective seminar course MIME 771 about a year after they have taken their Comprehensive Examination. The seminar is typically scheduled during their 6th semester since entering the program, or one year after their Comprehensive Examination. Students are required to send to the GPC an abstract of their seminar and CV/resume, at the latest a week before their seminar, and a filled out form including a take-home message and supporting concepts no later than on the Wednesday before their seminar. Failure to do so implies receiving no marks for this part of the examination. Further details for the Ph.D. seminar are provided in Appendix E.

Thesis Requirement

a) Thesis Supervision

Upon admission, each student will have a designated thesis supervisor from the academic staff of the department. It is important that students consult with their supervisor on a regular basis. As soon as possible after starting the program, but not later than the end of the first term, students should develop a research topic and research plan that is assigned or approved by their supervisor. Students are expected to: inform themselves of program requirements and deadlines; to work within these deadlines; to communicate regularly with their supervisor; and to submit progress reports as required.

At the beginning of the first semester, students must discuss with their supervisors to co-sign the [Letter of Understanding](#) and submit it on myProgress as discussed in Section 3.

In case of serious conflicts between the student and the supervisor, the student may request a change of supervisor. Appendix F provides procedures for supervisor/student conflicts and change of supervisor requests.

b) Thesis Submission and Oral Defense

In consultation with the student, the thesis supervisor nominates one internal and one external examiner of the thesis. The supervisor ensures the proposed examiners have

agreed to act as examiners within the time-period stipulated by GPS. The student and the supervisor should then complete all steps for the online thesis submission and evaluation as per Thesis Office guidelines found here:

<https://www.mcgill.ca/gps/thesis/thesis-guidelines/initial-submission/next-steps-doctoral>.

Student must make sure to upload the thesis submission checklist at the same time as the initial thesis uploading. Upon receipt of satisfactory reports from the external and internal examiners, the date of the final oral defense is then scheduled and conducted as per GPS regulations/guidelines. The composition of the Ph.D. Oral Defense Committee is proposed by the supervisor and approved by the Graduate Program Director. Students are reminded to consult with the Graduate Studies Coordinator regarding the recommended dates for submissions of thesis forms.

c) Time Limitation

The maximum allowable [length of studies](#) is up to, and including, Ph.D. 7, for full-time students. Students in their Ph.D. 6 level will be asked to specify when and how they expect to complete their programs within the remaining period. No extension is given after the specified term and students must withdraw from the program. Re-admission for students may be allowed upon the proof of the completion of their thesis.

d) Residence requirements for doctoral programs

Doctoral programs require a minimum of three years full-time residence (6 full-time terms) if admitted as Ph.D. 2 or four years (8 full-time terms) if admitted as Ph.D. 1.

In the doctoral program, students must be registered on a full-time basis for one more year after completion of the residency before continuing as additional session students. It is expected that at this stage, all the course work and Preliminary/Comprehensive Examinations will have been completed and the student will be engaged in thesis preparation. Students are encouraged to begin their research as early as possible.

More information on residency requirements can be found on the GPS website.

6. **STUDENT FUNDING**

The department makes every effort to ensure that each graduate student has partial or full funding throughout their graduate studies. Financial assistance is available through stipends from supervisor research grants or contracts, internal and external fellowships from provincial and federal governments, industrial research fellowships, differential fee waivers, teaching assistantships, departmental awards, etc. Usually, the type and level of funding offered is specified in the letter of admission.

Research Stipends/Scholarships

Most graduate students are funded through research stipends/scholarships. The amount of a stipend varies greatly according to offers the students receive upon their admission. Refer to the explanatory note* below for the typical terms covering the financial support package students receive. Students are paid to work on their own thesis research, which is part of their supervisor's program of research. The student must work on the specific project for which the funding is available. Upon satisfactory progress in terms of research, a research stipend may be renewed on a yearly or half-yearly basis. Since funding is awarded to the research supervisor, the graduate student may be expected to write bimonthly or quarterly reports to satisfy the granting organization or agency. Some research contracts held by supervisors may have other obligations and the graduate student who undertakes such a project is expected to respect the conditions stipulated in the contract awarded to the research supervisor and stipulated in the letter of admission. Annual fees are posted on the following website: www.mcgill.ca/student-accounts/fees. Please discuss the details surrounding the financial support you will be receiving directly with your supervisor.

External Fellowships

External fellowships are awarded on a competitive basis to prospective graduate students or graduate students in residence. Information can be found on this website: <https://www.mcgill.ca/gps/funding>

Internal Fellowships

The faculty of Engineering provides some financial support to graduate students with an excellent academic record and great research potential. More information can be found on this website: <https://www.mcgill.ca/engineering/students/graduate-students/funding>

Teaching Assistantships (TA)

Each semester, the department announces and posts teaching assistant positions for various courses. Interested graduate students may apply via this link on our web site - [Student Positions | Materials Engineering - McGill University](#). Teaching Assistants are assigned and paid as set out in the Collective Agreement between McGill University and A.G.S.E.M. (Association of Graduate Students Employed at McGill). Teaching assistants are expected in general to run tutorials and/or demonstrate laboratory experiments and correct laboratory reports. Teaching Assistantships are considered additional work for additional income. The Teaching Assistant and their supervisor should agree on a schedule arrangement in order not to delay their research activities.

7. LABORATORY SAFETY

Everybody should follow proper safety procedures while working in a lab. The Department has in place a compulsory safety policy overseen by a Safety Committee chaired by Professor K. Waters. At least once a year, the Safety Committee conducts walk-in

inspections to all laboratories. Each lab has a safety officer. The research supervisors and safety officers for each laboratory ensure that graduate students, post-doctoral fellows, and other research personnel, are aware of the risks associated with their project and follow safe laboratory procedures. Every new graduate student is strongly advised to take the on-line safety training course offered by the Environmental and Health Safety Office of the University at <http://www.mcgill.ca/ehs/training>. Training on Workplace Hazardous Materials Information System (WHMIS) is mandatory for all experimental/non-experimental laboratory personnel (go to <http://www.mcgill.ca/ehs/training/whmis/> for more info). Departmental safety orientation and Laboratory safety orientation checklists are compulsory for all graduate students. Such safety trainings and records are considered part of the progress of the graduate program. Related information is collected through a progress report. Additional info becomes available through announcements from our Safety Committee or can be found at <http://www.mcgill.ca/ehs/laboratory> and <http://www.mcgill.ca/materials/safety>.

APPENDIX A. PRELIMINARY EXAMINATION

1. Guidelines for the preparation of the Ph.D. Preliminary Oral Examination document

An important part of the Preliminary Ph.D. Examination is the supporting document that must be approved by the student's supervisor(s) and distributed to each member of the committee not later than two weeks before the exam date. This document is not a thesis, nor a publication. It is a well-documented research proposal, which presents theoretical, modeling and/or experimental aspects of the work in a well-balanced, interconnected, and clear manner. The goal is to demonstrate the student's ability to critically review previous scientific work, coupled with an ability to design experiments in a methodical and well-thought-out way. Research findings, when available, must also be interpreted and analyzed by referring to appropriate themes. Finally (and this is particularly important during the actual oral examination), the student should demonstrate "originality" and a command of topics and concepts relevant to the thesis, as well as their broader area of research.

The document should contain:

- ❑ Abstract.
- ❑ Table of Contents (with pagination).
- ❑ Introduction giving the background, justification, and objectives of the research project.
- ❑ Literature Survey, which should be substantial, critical, and interconnected. Previous Ph.D. theses should be consulted to provide examples of how literature surveys are prepared (if available). The review should lead to stated
 - ❑ (a) thesis goal, and
 - ❑ (b) specific objectives that if met will allow reaching the goal.
- ❑ Outline of the research methodology.
- ❑ Summary of Results in progress with suitable discussion. This part is not compulsory.
- ❑ Clear statement of the intended contribution to original knowledge.
- ❑ Schedule of the research program including milestones (aligned with the objectives mentioned above)
- ❑ Conclusion.
- ❑ Complete bibliography.

The document, not including the title page, abstract, table of contents, and bibliography should be approximately 25 pages long, including illustrations, with 12-font size 1½ line spacing. Documents not respecting these guidelines will be returned to the candidate and the exam rescheduled if necessary.

2. Evaluation of Preliminary Ph.D. Oral Exam

The Preliminary Ph.D. oral exam will be evaluated based on:

- Quality of document
- Oral presentation
- Background knowledge on the subjects relevant to the Ph.D. topics

3. Schedule of Ph.D. Preliminary Oral Exam

Student Entered Program in	PhD1	PhD2	PhD2 with four lecture courses
May Year 1	November Year 2	May Year 2	November Year 2
September Year 1	November Year 2	May Year 2	November Year 2
January Year 1	May Year 2	November Year 1	May Year 2

APPENDIX B. PRELIMINARY EXAMINATION EVALUATION SHEETS

Department of Mining and Materials Engineering McGill University

Ph.D. Preliminary Oral Examination

The purpose of the preliminary exam is to test whether the student has a clear goal and objectives for their PhD research project and whether the student has sufficient background knowledge and preparation. This background knowledge is evident by the quality of their literature review, description of experimental and/or computational methodology, definition of work strategy (research schedule), etc. which are important components that will be evaluated in this exam. Their research progress itself in terms of actual results is not a necessary component, but it is looked upon favorably by the committee.

The PhD preliminary examination is open, but the question-and-answer period is a closed session. No persons other than committee members are allowed in the room during this time.

The preliminary report must be sent to the committee at least 2 weeks prior to the examination.

Committee Chair:

- i) Check the student file:
 - a. The student must have registered for the course. (*Winter semester registration for Summer prelim; Fall registration for Fall prelim*)
 - b. Course work: minimum one course.
 - c. CGPA (graduate course grade): minimum B-
 - d. Latest Progress Tracking form to be reviewed by committee after the examination .
- ii) Student oral presentation: 20 minutes
- iii) Oral exam (Q&A): flexible but approximately ~ 1 hour.
- iv) After the exam, please discuss with committee members and fill out the report on site. Then, please give the student overall feedback by calling them back into the examination room. Please give the signed original to Barbara Hanley.

Committee Members:

- i) Committee members should give feedback to the student about the strengths and weaknesses of their presentation, and their research plan, after general comments by the Chair to the student.
- ii) The same rule as the thesis defence with regards to the arms length criteria is applied. Also, the idea behind this committee is that it serves for the progress tracking of the student.

NAME OF STUDENT:

I.D. #

DATE OF EXAMINATION:

EXAMINATION COMMITTEE:

Arms length

Committee Chair

(Y / N)

Thesis Supervisor

(Y / N)

Thesis Co-supervisor (if applicable)

(Y / N)

Supervisory Member

(Y / N)

Examiner

(Y / N)

1. STUDENT SELF ASSESSMENT REPORT SECTION

This section is to be filled by the student prior to the Preliminary Exam and circulated to the evaluation committee. Does the report contain and/or comply with the report instructions? Please select the appropriate response.

Report structure	Yes	No
The report has a cover page.		
The report has an abstract of max 150 words.		
The report has a detailed Table of Contents.		
The report has a list of Figures.		
The report has a list of Tables.		
The Figures, Tables and Equations are properly numbered and in order.		
The pages of the report are numbered, and the report has a maximum page count of 25 pages, excluding cover page, abstract, a Table of Contents, and lists of Figures, Tables, and References.		
Is the font consistent throughout (including the References and Appendices)?		
List the three Foundation course modules taken: 1. 2. 3.		

2. PRELIMINARY EXAMINATION REPORT SECTION

The following sections are to be filled by the examination committee at the date of the exam. The assessment criteria below are matching the thesis evaluation form: 5: Excellent (top 2%); 4: very good (top 10%); 3 good (top 25%); 2: Satisfactory; 1: Unsatisfactory.

Assessment Criteria	Comments				
Content of the report	5	4	3	2	1
Comments on the quality of writing					
Are external sources of information correctly referenced?					
Are the Figures and Tables clear? Are Figures, Tables and Equations referenced and explained in the main body of the text?					
Literature review	5	4	3	2	1
Is there a comprehensive review of relevant literature, which sets the stage for the PhD project? Is the relevance of the research clear? Is it clear that there is a knowledge gap which will be filled?					
Experimental work	5	4	3	2	1
Is the experimental (or modelling) methodology outlined clearly and logically?					
Results / Discussion*	5	4	3	2	1
Is there a clear relevance of the results to the project?					
What statistics are being used to confirm the validity of the results?					

Timeline	5	4	3	2	1
Has the candidate produced a sensible timeline (such as a Gantt Chart) which describes their proposed plan?					
Contributions to Original Knowledge	5	4	3	2	1
Are the contributions clearly stated and expanded upon?					
Conclusions	5	4	3	2	1
Is everything brought together logically?					
Additional Comments (if available)					

*** NOTE: Results are not mandatory for the Preliminary Exam. If the candidate has not started their experimental work, please write N/A here**

3. PRELIMINARY EXAMINATION PRESENTATION SECTION

Assessment Criteria	Comments				
Presentation technique	5	4	3	2	1
Does the speaker: <ul style="list-style-type: none"> • Keep the audience's attention? • Speak to the audience? • Read off the screen? • Use a laser pointer correctly • Keep to time • Has the speaker tailored the presentation to the audience? 					
Clarity of speech	5	4	3	2	1
Is it easy to understand the speaker? Is there an unnecessary overuse of jargon, or is the student able to clearly communicate to an audience with varied specialities?					
Clarity of slides	5	4	3	2	1
Can you read everything on the slides? Are the Figures and Tables clear? Are Figures and data from other sources referenced?					
Introduction of topic	5	4	3	2	1
Was it clearly communicated what the speaker is working on and why? Is the relevance of the research demonstrated? Does the candidate set the scene for their research?					
Experimental work (completed and/or proposed)	5	4	3	2	1
Is the experimental (or modelling) plan outlined clearly and logically?					

Did the candidate demonstrate competency with the techniques they propose to use?					
Results / Discussion *	5	4	3	2	1
Does the speaker explain the results and their relevance to the project? Does the speaker understand what the results mean and how they will lead into other aspects of the project?					
Timeline/Project Plan	5	4	3	2	1
Has the candidate introduced a sensible timeline (such as a Gantt Chart) describing their proposed plan? Is the project described consistent with the written report?					
Contributions to Original Knowledge	5	4	3	2	1
Did the candidate introduce/describe their anticipated contributions and why they are important and original?					
Conclusions	5	4	3	2	1
Are concluding statements clear and logical?					
Ability to answer questions	5	4	3	2	1
Does the speaker show that they have a strong grasp of the subject? Can they work through the question to come to a sensible answer? Are they able to say "I don't know" if required?					
Additional Comments (if available)					

*** NOTE: Results are not mandatory for the Preliminary Exam. If the candidate has not started their experimental work, please write N/A here.**

4. PRELIMINARY EXAMINATION GENERAL ASSESSMENT SECTION

Assessment Criteria	Comments				
Feasibility of completion of proposed research and awarding of a PhD	5	4	3	2	1
<p>Is the project suitable for a PhD?</p> <p>Are there sufficient technical/fundamental components to advance the knowledge base of the research field?</p>					
<p>Can the candidate explain the relevance of their project (big picture)?</p>					
<p>Is the student knowledgeable of the required experimental techniques used?</p>					
<p>Has the candidate developed their research plan on sound scientific arguments?</p>					
<p>Is the timeline proposed realistic? Are the components proposed realistic?</p>					
<p>Are there any contingency plans in place in case of unforeseen complications? For example:</p> <ul style="list-style-type: none"> • If a specific equipment breaks down is there a backup plan? • What happens if a collaborator/collaborator's lab is no longer available? 					
Report writing and presentation skills	5	4	3	2	1

Should the candidate take any writing or presentation classes? If so, which ones?		
Are there any gaps in the candidate's knowledge	Yes	No
No- None that were apparent in the Preliminary Exam Yes – Should the candidate be suggested to take extra courses? If so, which ones?		
Preparation for Comprehensive Exam		
Which topic(s) should the candidate focus on for their Comprehensive Exam?		
Additional Comments (if available)		

Overall Grade:

PASS / REPEAT EXAM / REPEAT ORAL ONLY / RESUBMIT REPORT / FAIL

Pass: *the student is invited to continue their graduate program as planned.*

Repeat examination: *The student has shown potential to conduct a Ph.D. program, but the committee must be reassured on some of the evaluation criteria. The student is invited to re-do the preliminary examination and resubmit a new version of the report within a time frame of 6 months. The student should use the comments provided by the committee to help focus the strengthening of the weak points. Only one resubmit opportunity is allowed.*

Repeat oral exam: *The student has shown potential to conduct a Ph.D. program, but the committee must be reassured on some of the evaluation criteria. The student is invited to re-do only the oral portion of the examination within a time frame of 6 months. The originally submitted report will be used for the rerun exam. The student should use the comments provided by the committee to help focus the strengthening of the weak points. Only one resubmit occasion is allowed.*

Resubmit report: *The student has shown potential to conduct a Ph.D. program, but the committee has found deficiencies in the report. The student is invited to re-write only the report portion of the examination within a time frame of 6 months. No oral examination will be re-taken. The student should use the comments provided by the committee to help focus the strengthening of the weak points. The evaluation committee will be reviewing the report and the Chair of the examination will be sending back the summary of the appraisal of the new report to the candidate. Only one resubmit opportunity is allowed.*

Fail: *The student is asked to withdraw from the program or backtrack to the Master's program.*

Signatures:

Date:

Committee Chair:

Thesis Supervisor:

Thesis Co-supervisor:

Supervisory Member:

Examiner:

APPENDIX C. COMPREHENSIVE EXAMINATION

Part 1. EVALUATION SHEETS

Department of Mining and Materials Engineering
McGill University

Ph.D. Comprehensive Exam

The purpose of the Comprehensive exam is to test whether the student has a fundamental understanding of Materials Science and Engineering needed to conduct their PhD project. A subject relevant to the student's research will be tested by the committee.

Student:

Date:

This report is to be completed by the Chair of the Committee, in discussion with the Committee, after the question period with the student out of the examination room. All Committee members that agree with the final decision must sign the form, which is to be submitted to the Graduate Program Coordinator (Barbara Hanley). If any Committee member disagrees with the decision, they must submit a minority report to the Graduate Program Coordinator (Barbara Hanley) within 48 hours of the Comprehensive Exam.

Overall Grade: PASS / FAIL (RERUN EXAM) / FAIL

Pass: the student is invited to continue their graduate program as planned. Fail (Rerun examination): This option should be used if the student did not pass the exam at their first attempt. The student is invited to re-do the comprehensive examination within a time frame of 3 months. The student should use the comments provided by the committee to help strengthen their weak points. Only one re-evaluation occasion is allowed. Fail: The student has already failed the exam once, and is re-taking the exam after a Fail (Rerun) outcome of the first exam; the student is now failing the exam a second time. In this case, the student is asked to withdraw from the program or backtrack to the Masters.

Committee Chair		
Thesis Supervisor		
Supervisory Member		
Examiner		

COMPREHENSIVE EXAMINATION; 1)

Subject	Comments
Does the student have a general understanding of the subject to explain its relevance to their research project?	
Does the student have a detailed understanding (<i>i.e.</i> , assumptions, shortcomings) of theories in the subject?	
Can the student propose how to apply the theoretical principles to their research project or to the advancement of existing knowledge? ?	
Can the student explain fundamental concepts using plain language (<i>i.e.</i> , excellence in delivery)?	

Part 2. Schedule of Ph.D. Comprehensive Exams

Student Entered Program in	PhD1	PhD2	PhD2 with four lecture courses*
May Year 1	November Year 3	May Year 3	November Year 3
September Year 1	November Year 3	May Year 3	November Year 3
January Year 1	May Year 3	November Year 2	May Year 3

APPENDIX D. GRADUATE SEMINAR EVALUATION SHEETS (Master Students)

Instructions to M.Eng/M.Sc. Students

Prior to your seminar you should identify a “take home message,” and up to 3 supporting concepts. These four things should be considered as learning objectives for your seminar. That is, items that you are hoping your audience will learn from your presentation. Your description of these four items should be brief (1-2 sentences) but to the point. You are required to paste these items into Section I of the marking sheet and then email the updated marking sheet with your name to the course instructor and the members of your committee. The deadline for this task is by noon on the Thursday just before your seminar.

Your committee will be composed of three professors and two graduate students.

The members of your committee and the course instructor will evaluate your performance and provide feedback on the areas that you identify (Section I) and in more general terms (Section II). Thus, it is important for you to identify technical content related to your research as these supporting concepts. However, you are allowed to have one of these supporting concepts from the introductory portion of your talk. Your take home message should, of course, be tied to your conclusions.

Additional Information

If you provide less than 3 supporting concepts, the marks for the take home message and each concept will increase proportionally, with the total marks for this section remaining at 50.

If you provide this form later than the Wednesday before your seminar, you will receive no marks for this section.

Please make sure to maintain good formatting in the attached marking sheet, such that it may be printed out on a single page and that the locations where marks will be indicated do not change.

If you provide less than three supporting concepts, please alert your course instructor so that we can modify the marking sheet accordingly in time for your deadline.

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M.Sc./M.Eng. Seminar Mark Sheet

Student Name: _____

SECTION I: Student's Presentation Goals (Assessed by the Assigned Committee and Course Instructor)

The student identified these as learning objectives of his/her presentation. Please provide a mark and feedback; *feedback is always welcome and **required** if the grade is lower than 70% of the maximum.*

- 1) **EXAMPLE-Identify and establish the effect of temperature on bubble size** ___ / 20
Feedback:

- 2) **EXAMPLE-To outline importance of bubbles and bubble size in flotation** ___ / 10
Feedback:

- 3) **EXAMPLE-To delineate other temperature-dependent properties of water that could impact bubble size distribution** ___ / 10
Feedback:

- 4) **EXAMPLE-To describe the effect of frother concentration and Critical Coalescence Concentration phenomenon on bubble size** ___ / 10
Feedback:

SECTION I TOTAL: _____ / 50

DEPT. OF MINING AND MATERIALS ENGINEERING
McGill University



M.Sc./M.Eng. Professor Evaluation Sheet

Student Name: _____

SECTION II: Additional Marking and Feedback (Assessed by all professors present in addition to the Assigned Committee and Instructor)

Feedback is always welcome and **required** if the grade is lower than 70% of the maximum.

1. Background Material / Introduction:

(Appropriate and accurate? Clear and concise?) _____ / 5

Feedback: _____

2. Organization of Presentation:

(Connectivity between points? Was the overall organization good?) _____ / 10

Feedback: _____

3. Technical Content:

(Graphs, data, micrographs explained correctly and coherently?) _____ / 10

Feedback: _____

4. Comprehensibility:

(Public speaking skills were good? Slides were easy to read and understand?) _____ / 10

Feedback: _____

5. Safety Slide:

(Relevant to research work? Message clearly stated?) _____ / 5

Feedback: _____

6. Clarity of Conclusions:

(Summary tied it all together? Conclusions were clear and well-supported?) _____ / 10

Feedback: _____

7. Answers During Question Period:

(Did the speaker do their best to effectively answer the questions?) _____ / 5

Feedback: _____

SECTION II TOTAL: _____ / 55

TOTAL SCORE: _____ / 105

Professor's Signature _____

APPENDIX E. GRADUATE SEMINAR EVALUATION SHEETS (PhD Students)

Instructions to Ph.D. Students

Prior to your seminar you should identify a “take home message,” and up to 3 supporting concepts. These four things should be considered as learning objectives for your seminar. That is, items that you are hoping your audience will learn from your presentation. Your description of these four items should be brief (1-2 sentences) but to the point. You are required to paste these items into Section I of the marking sheet and then email the updated marking sheet with your name to the course instructor and the members of your committee. The deadline for this task is by noon on the Thursday just before your seminar.

Your committee will be composed by three professors and two graduate students.

The members of your committee and the course instructor will evaluate your performance and provide feedback on the areas that you identify (Section I) and in more general terms (Section II). Thus, it is important for you to identify technical content related to your research as these supporting concepts. However, you are allowed to have one of these supporting concepts from the introductory portion of your talk. Your take home message should, of course, be tied to your conclusions.

Additional Information

If you provide less than 3 supporting concepts, the marks for the take home message and each concept will increase proportionally, with the total marks for this section remaining at 50.

If you provide this form later than the Wednesday before your seminar, you will receive no marks for this section.

Please make sure to maintain good formatting in the attached marking sheet, such that it may be printed out on a single page and that the locations where marks will be indicated do not change.

If you provide less than three supporting concepts, please alert your course instructor so that we can modify the marking sheet accordingly in time for your deadline.

DEPT. OF MINING AND MATERIALS ENGINEERING
McGill University



Ph.D. Seminar Mark Sheet

Student Name: _____

SECTION I: Student's Presentation Goals (Assessed by the Assigned Committee and Course Instructor)

The student identified these as learning objectives of his/her presentation. Please provide a mark and feedback; *feedback is always welcome and **required** if the grade is lower than 70% of the maximum.*

1) **Take home message** _____ / 20

Feedback:

2) **Supporting Concept #1** _____ / 10

Feedback:

3) **Supporting Concept #2** _____ / 10

Feedback:

4) **Supporting Concept #3** _____ / 10

Feedback:

SECTION I TOTAL: _____ / 50

DEPT. OF MINING AND MATERIALS ENGINEERING
McGill University



Ph.D. Professor Evaluation Sheet
Student Name: _____

SECTION II: Additional Marking and Feedback (Assessed by all professors present in addition to the Assigned Committee and Instructor)

*Feedback is always welcome and **required** if the grade is lower than 70% of the maximum.*

1. Background Material / Introduction:

(Appropriate and accurate? Clear and concise?) _____ / 5
Feedback: _____

2. Organization of Presentation:

(Connectivity between points? Was the overall organization good?) _____ / 10
Feedback: _____

3. Technical Content:

(Graphs, data, micrographs explained correctly and coherently?) _____ / 15
Feedback: _____

4. Comprehensibility:

(Public speaking skills were good? Slides were easy to read and understand?) _____ / 10
Feedback: _____

5. Safety Slide:

(Relevant to research work? Message clearly stated?) _____ / 5
Feedback: _____

6. Clarity of Conclusions:

(Summary tied it all together? Conclusions were clear and well-supported?) _____ / 10
Feedback: _____

7. Answers During Question Period:

(Did the speaker do their best to effectively answer the questions?) _____ / 15
Feedback: _____

SECTION II TOTAL: _____ / 70
TOTAL SCORE: _____ / 120

Professor's Signature _____

APPENDIX F. PROCEDURES FOR STUDENT/SUPERVISOR CONFLICTS

Departmental Disagreement Resolution Procedure and Change of Supervisor Requests

These procedures are intended to aid in the resolution of conflicts between graduate students and their supervisors (or supervisory committees). It is important to remember that students should always attempt to resolve such conflicts within their department before seeking outside assistance, and the confidentiality of the issues raised at each step will be ensured to the greatest possible extent.

If you find yourself in a conflict with your supervisor or supervisory committee, you should follow these steps, in this order:

1. Informal discussions with your supervisor. Discuss the matter with the supervisor – they are often unaware of the problem and will usually be happy to help find a satisfactory solution.
2. Discuss with the Graduate Program Director - refer to section below.
3. Discuss with the Department Chair. The chair should attempt to resolve the conflict, either by providing mediation or making alternative arrangements for the continued supervision of the student if the student is otherwise performing satisfactorily in the program.

If the student's supervisor is also graduate program director or department chair and the problem cannot be resolved directly with them, students should skip the corresponding step.

4. Informal meeting with the Associate Dean (Graduate and Postdoctoral Studies) or the Ombudsperson. Under these circumstances, an informal meeting outside the department is often all that is required for both sides to reach an agreement. If further steps are warranted, the Associate Dean or Ombudsperson will then advise you to that effect.

Change of Supervisor Requests

In exceptional circumstances, the student may request by writing to the Graduate Program Director a change of thesis supervisor while providing valid reasons. If a new supervisor is willing to accept the student, the student may continue with their program; otherwise the student may be asked to withdraw from the program. In case of potential conflict with the GPD, the matter may be referred to the Department Chair for a final decision. Note that certain reasonable deliverables may be required to be provided before a change of supervisor is finally approved.