**Name of Unit/Program: Biosystems Engineering  
(M.Sc., M.Eng. & Ph.D.)**

<table>
<thead>
<tr>
<th>Faculty of Graduate Studies Regulation 2019/20</th>
<th>Supplemental Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. The integrity of the process is at stake. The major goal of this guide is to prevent potential problems that may affect the completion of a student's program. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein. All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments/units may have additional regulations that supplement these general regulations. All such supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and kept on file in the Faculty of Graduate Studies Office. For those programs that are administered through a Faculty (as opposed to a Department) the term “Department” should be substituted by “Unit” within this document (i.e. Department Head becomes Unit Head.)</td>
<td>The Department of Biosystems Engineering has a Graduate Committee that consists of the Graduate Chair and two additional academic members of the Department. The Graduate Chair and members of the Graduate Committee are appointed by the Department Head.</td>
</tr>
</tbody>
</table>
1.1 Application and Admission Procedures

The application (and all required documentation) is to be submitted directly to the Faculty of Graduate Studies, via the online application system. **Applicants should contact the department/unit to which they are applying for the procedures and requirements of that department/unit.** Contact information for each unit can be found at [http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html](http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html).

1.1.1 Process:

1.1.1 (a) A completed official application for admission form must be submitted, together with the application fee and supporting documentation, to the Faculty of Graduate Studies, via the online application system.

**NOTE:** International students must pay special attention to the appropriate requirements with respect to transcripts (see application form for details).

1.1.1 (b) Applications are subsequently reviewed by the unit offering the program which will decide whether the applicant meets the unit’s criteria including, but not limited to, availability of advisors, space, and facilities.

1.1.1 (c) Notification of recommended/rejected applications is sent by the Head of the unit to the Faculty of Graduate Studies. Applications recommended for admission are checked to determine if they meet the Faculty of Graduate Studies’ eligibility requirements. The Faculty of Graduate Studies then notifies applicants of their acceptance or rejection.

1.1.2 Deadlines for Recommended Applications (from Departments/Units to the Faculty of Graduate Studies)

The following are the deadlines for receipt by the Faculty of Graduate Studies of recommendations from departments/units.

<table>
<thead>
<tr>
<th>Term</th>
<th>Start Date</th>
<th>Canadian/US</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td>September</td>
<td>July 1</td>
<td>April 1</td>
</tr>
<tr>
<td>WINTER</td>
<td>January</td>
<td>November 1</td>
<td>August 1</td>
</tr>
<tr>
<td>SUMMER</td>
<td>May</td>
<td>March 1</td>
<td>December 1</td>
</tr>
</tbody>
</table>

**IMPORTANT:** These are not application deadlines. Applicants are **required** to submit the application and documentation to the Faculty of Graduate Studies to meet the application deadline in place for a particular department/unit. Applicants are advised to confirm the deadline of the department/unit to which the application is being made; deadlines can be found on the application program page at [http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html](http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html).

1.1.3 Application Fee

A $100.00 (CDN) non-refundable fee must accompany admission applications from all Canadian, Permanent Resident, and International applicants.
1.1.4 Transcripts

Unofficial copies of transcripts and final degree certificates are acceptable for initial assessment and provisional admission purposes.

Upon admission to the Faculty of Graduate Studies, applicants must arrange for official transcripts from all post-secondary institutions attended to be sent to the Faculty of Graduate Studies within one (1) month of the date on the admission letter. Applicants will be placed on hold, which prevents registration until all admission requirements have been submitted. **All transcripts must arrive in sealed, university-stamped envelopes sent directly from the issuing institution(s) and be accompanied by official and literal English translations (where applicable, see 1.1.5).** For international degrees or where the transcripts does not or will not clearly state that a degree has been conferred, a copy of the official degree certificate is also required.

1.1.5 Transcripts: International

Where academic records from a country other than Canada are produced in a language other than English, the applicant must arrange for the submission of official literal English translations of all records. To be official, original language documents and English translations must arrive together in envelopes which have been sealed and endorsed by the issuing institution. For international degrees or where the transcript does not or will not clearly state that a degree has been conferred, a copy of the official degree certificate is also required.

1.1.6 Transcripts: University of Manitoba

University of Manitoba students are not required to submit University of Manitoba transcripts.

1.1.7 Proficiency in English

A successfully completed English Language Proficiency Test from the approved list is required of all applicants unless they have received a secondary school diploma and/or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List (see 1.1.8). The Faculty of Graduate Studies requires a passing, acceptable English Language Test score in order to offer admission. **Please note:** In all cases, test scores older than two (2) years (from the time of completing the test) are invalid.

Thresholds required for successful completion are indicated in parentheses.

- University of Michigan English Language Examination Assessment Battery (MELAB) (80%)
- Test of English as a Foreign Language (TOEFL)– Internet based -iBT (86; minimum score of 20 in each of reading, writing, listening and speaking categories)
- Canadian Test of English for Scholars and Teachers (CanTEST) (band 4.5 in listening and reading and band 4.0 in writing and oral interview)
- International English Language Testing System (IELTS) (6.5)
- Academic English Program for University and College Entrance (AEPUCE) (65%)
- Canadian Academic English Language Assessment (CAEL) (60 overall and 60 on each subset)
- PTE Academic (61% overall)

**Note:**

In addition, foreign language students may be asked by the department/unit to complete the CanTEST prior to or following registration in the Faculty of Graduate Studies and, if need be, the department/unit may recommend remedial measures in language skills based on the results of the CanTEST. Some units may require a specific test or test scores greater than those indicated above. Students should check department/unit supplemental regulations for details.

### 1.1.8 English Language Proficiency Test Exemption List

Applicants holding secondary school diplomas and/or recognized university degrees from countries on the Faculty of Graduate Studies English Language exemption list are not required to submit an English Language Proficiency score. For more information please see our website at [http://umanitoba.ca/faculties/graduate_studies/admissions/english_exemption_list.htm](http://umanitoba.ca/faculties/graduate_studies/admissions/english_exemption_list.htm)

### 1.1.9 Letters of Recommendation

Letters of Recommendation are to be completed via the online application. Applicants are required to add their ‘Recommendation Provider(s)’ contact information so that each recommender is sent an automated email notification.

Generally, two (2) Letters of Recommendation must be submitted to the Faculty of Graduate Studies. For the number of recommendation letters necessary, applicants should review their specific Program webpage at [http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html](http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html).

### 1.1.10 Admission Tests

Some departments/units require admissions tests, such as the Graduate Record Examination (GRE) or the Graduate Management Aptitude Test (GMAT). These requirements are listed in the supplemental regulations of the particular department/unit, and if required, the scores must be submitted at the time of application.

### 1.1.11 Entrance Requirements

The minimum standard for acceptance into any category in the Faculty of Graduate Studies is a 3.0 Grade Point Average (GPA) or equivalent in the last two (2) previous years of full time university study (60 credit hours).

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

### 1.1.12 Eligibility of University of Manitoba Staff Members
A staff member at The University of Manitoba at the rank of Assistant Professor or above is not eligible to apply for admission to a graduate program in the department/unit in which the appointment is held.

1.2 Registration Procedures

1.2.1 Registration

Pre-Master’s students are not normally allowed to register in 7000-level courses or above, with the exception of GRAD 7500, unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.

Undergraduate students may be permitted to register in 7000-level courses or above on recommendation of the department/unit offering the graduate course, subject to the conditions listed below:

- Undergraduate students must obtain permission from the department/unit head and course instructor before registering for a graduate course.
- Only undergraduate students completing an undergraduate degree at the University of Manitoba are eligible to enroll in a graduate course.
- Undergraduate students are not eligible for admission to any graduate course that is cross-listed with an undergraduate course, or that is scheduled to be taught at the same time and location as an undergraduate class.
- Undergraduate students will only be eligible to receive graduate-level credit for a course designated as 7000-level or above if at least 75% of the students registered in the course are graduate students.
- Undergraduate students who complete a graduate course are not guaranteed admission to a graduate program.

On admission to a graduate program at the University of Manitoba, application may be made to the Faculty of Graduate Studies to apply any previously completed graduate courses toward meeting program requirements, subject to the restrictions listed below.

- No more than 50% of the coursework required in a graduate program may be imported.
- Only courses in which a C+ grade or higher, or the minimum grade required by the program to which the course would be applied, is achieved are eligible to be considered to be used toward meeting the requirements of any graduate program.
- Any graduate course completed by an undergraduate student may subsequently be applied to a graduate program only if it has not been used toward completion of any other degree program.
- Any graduate course completed by an undergraduate student for which a passing grade has been obtained (i.e., C+ or higher) may not be repeated should the student later gain admission to a graduate program.
- Courses completed more than seven (7) years prior to the date of awarding a degree may not normally be used for credit towards the degree (see section 4.7.2 Lapse of Credit of Courses)

All graduate students must initially register in the term specified in their letter of acceptance as specified in the Academic Schedule of the Graduate Calendar. Any student not registering by the registration deadline for the term specified in their letter of offer will be required to re-apply for admission. In exceptional circumstances and with prior approval from the department/unit, a student may defer registration for up to one (1) term following acceptance into the Faculty of Graduate Studies. In the
case of international students, admission may be deferred, with prior approval from the department/unit, for up to one (1) year following acceptance.

**All programs must be approved by the Head of the major department/unit or designate.** Approval to take courses from departments/units outside the major department/unit must be obtained from the outside department/unit.

The approval or denial of admission and registration to two (2) programs rests with the Dean of the Faculty of Graduate Studies in consultation with the department/unit concerned. The approval/denial must be submitted to the Faculty of Graduate Studies prior to the student’s admission/registration on the "Concurrent Curriculum Permission" form ([http://intranet.umanitoba.ca/student/records/2323.html](http://intranet.umanitoba.ca/student/records/2323.html)).

Where a student does register in two (2) programs, it is important to note that dual registration may affect funding, and that completing a graduate program as a part-time student will affect eligibility for The University of Manitoba Graduate Fellowship (UMGF) and may limit other funding possibilities.

### 1.2.2 Re-Registration

All students must re-register in all Fall, Winter, and Summer terms of their program until a degree is obtained. **Failure to re-register will result in the student being discontinued from their graduate program.** A student who has been discontinued and would like to be considered for continuation in a program must apply for re-admission, which is not guaranteed.

The notation 'Discontinued Graduate Program' will be placed on the academic record of any graduate student who has failed to maintain continuous registration.

### 1.2.3 Registration Revisions

For designated periods subsequent to registration, approved revisions may be made. It is required that students adhere to dates and deadlines as published in the Academic Schedule of the Graduate Academic Calendar.

**Note:** Graduate students are not permitted to withdraw from courses without written permission from their Department/Unit Head on recommendation from their advisor/co-advisor (and/or advisory committee). The notation “Required to Withdraw” may be placed on the academic record of any graduate student who has withdrawn from courses without such approval.

### 1.2.4 Advisor Student Guidelines

All students in thesis/practicum programs, in consultation with their advisor/co-advisor, are required to complete the Advisor Student Guidelines as soon as possible after registration but no later than at the time of submission of the first Progress Report. If a student does not have an advisor/co-advisor at this time, the interim advisor will be required to complete the Advisor Student Guidelines.
1.2.5. Western Deans’ Agreement

This agreement was established in 1974 as an expression of co-operation and mutual support among universities offering graduate programs in western Canada. Its primary purpose is the reciprocal enrichment of graduate programs throughout western Canada. This agreement is not intended to preclude other agreements between participating institutions. A list of the participating Universities can be found at http://wcdgs.ca.

1.2.5.1 The Western Deans’ Agreement normally provides an automatic tuition fee waiver for visiting students. Graduate students paying normal required tuition fees to their home institution will not pay tuition fees to the host institution.

1.2.5.2 Only degree level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.

1.2.5.3 Program fees are always to be paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution. Wherever possible, these fees will also be waived.

1.2.5.4 Students will qualify for the fee waiver if they:

a) present the “Authorization Form: Western Deans’ Agreement” signed by the Dean or designate and the department/unit Head or advisor/co-advisor of a participating Western institution at least one (1) month prior to the start of term, specifying the courses to be taken for credit toward a graduate degree program at their home institution;

b) are in good standing in a graduate program at the home institution;

c) do not owe tuition and/or fees at the home institution.

1.2.5.5 Students must meet all requirements as prescribed by the host university’s regulations, deadlines, class capacities, and course prerequisites.

1.2.5.6 Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant’s graduate degree program. Fee waiver is not permitted for audit or non-credit courses.

1.2.5.7 Students must have the Authorization Form approved by the relevant department/unit Head and the Faculty of Graduate Studies at the host institution at least one (1) month prior to the commencement of the course(s) requested. The fee waiver is not available retroactively.

1.2.5.8 Students are subject to regulations of the home institution governing credit for the courses to be undertaken. As a condition of registration at the host institution,
students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of courses selected.

1.2.5.9 Students must send confirmation of registration and notice of any change to the Registrar's Office of the home institution at the time of registration or course change is completed.

1.2.5.10 Students may not claim fee waivers under the terms of this Agreement for a period of more than twelve (12) months in total.

1.2.5.11 Each institution has its own regulations regarding the maximum number of transfer credits permitted in a given degree program. A list of the participating Universities can be found at [http://wcdgs.ca/](http://wcdgs.ca/)

1.3 Course Classifications

1.3.1 General Classifications

Students who register through Aurora Student Information System (Aurora Student) must also have prior approval of the department/unit Head or designate. Students registering through Aurora Student should add only those courses that are a Major (Standard “S”) course in their program. Courses with Auxiliary “X”, Audit “A”, or Occasional “O” status (see below) must be added by the department/unit.

“X” Auxiliary course: Course is not a major requirement of the program but is required/recommended by the student’s advisor/co-advisor.* Extra courses that are not part of the Master’s or Ph.D. program but which are specified and required/recommended by the student’s advisor/co-advisor, may be classified as “X” (Auxiliary) and the grade will not be included in the degree GPA which appears on the transcript. However, “X” course grades may be used in the calculation of the GPA for continuation in the program and a minimum grade requirement may be required for “X” coursework by the department/unit. (Please consult the individual department/unit’s supplemental regulations.) Additionally, “X” courses are used in the calculation of the GPA for the purposes of Admission and Awards. (The University of Manitoba Graduate Fellowship [UMGF] and International Graduate Student Scholarship [IGSS] use “X” courses in the calculation of the GPA.) The student’s advisor/co-advisor and department/unit Head must determine if there is a valid need for the registration in courses under the “X” classification. A maximum of twelve (12) credit hours under the “X” course classification is permitted while registered in a given program.

“A” Audit course: Course is not taken for credit. No grade is recorded. Additional fees will be assessed.

“O” Occasional course: Course is not a requirement of the program. Additional fees will be assessed.

* Notes: Students are not permitted to audit a course and take the same course for credit at a later date.

Changes in course classifications are regarded as course/program changes and may not be made without approval (refer to 1.2.3 Registration Revision section of this Guide) or after the deadline dates for course changes as indicated in the Academic Schedule of the Calendar.
1.3.2 Continuing Courses (CO)

For those graduate level courses (6000, 7000, and 8000) which are being taken by students enrolled in the Faculty of Graduate Studies and which continue beyond the normal academic term, the instructor shall recommend that a mark classification of “CO” be used until such time as a final grade can be established. If the course is not completed by August 31, the student must re-register for the course(s).

In the absence of an assigned mark of “CO”, the student may receive a mark of “F” in that term.

Note:

A “CO” will normally not be permitted longer than twelve (12) months. In exceptional circumstances, where a “CO” grade is requested for a second twelve (12) months, at the time the “CO” grade is submitted, the instructor and department/unit Head must also submit the “Recommendation for Continuing Status of a Course” form stating the reason for the “CO” and the deadline by which the course must be completed.

1.3.3 Incomplete Courses

Students who are unable to complete the term work prescribed in a course may apply to the instructor prior to the end of term for consideration of a grade classification of “Incomplete”. It is understood that the student is to write the final examination if one is scheduled for the course. A “Time Extension for Completion of Term Work” form must be completed.

Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work.

Normally, the following maximum extensions are allowed:

August 1st for courses terminated in April

December 1st for courses terminated in August

April 1st for courses terminated in December

If a final grade is not reported within one (1) month of the extension deadline, the Incomplete (I) classification will be dropped and the grade will remain as awarded. Normally, the student will no longer have an opportunity to improve the grade. In no case will the satisfaction of the incomplete requirements result in a lower grade being awarded.

1.3.4 Cross-Listed Courses

Cross-listed courses are defined as courses taught at the same time and in the same location.
The regulations below place limits on the extent to which cross-listed courses may be used to meet graduate program requirements.

1. In order to receive credit for any 7000-level course that is cross-listed with a 3000- or 4000-level undergraduate course, the 7000-level course must have a distinct syllabus, and the course content and evaluation methods must be at the graduate-level.

2. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a 1000- or 2000-level undergraduate course unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.

3. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a previously completed course.

### 1.4 Student Status/Categories of Students

#### 1.4.1 Full-Time And Part-Time Students

Graduate students are admitted as full-time students. Graduate student status is not determined by the number of credit hours taken per term. Therefore, students who spend much of the time in a laboratory or library engaged in research or writing a thesis/practicum, or who spend part of the academic year engaged in research elsewhere, are regarded as full-time students.

Student status should be determined by the student and advisor/co-advisor, and changes must be requested on the “Part-Time Status” form [http://umanitoba.ca/faculties/graduate_studies/forms/index.html](http://umanitoba.ca/faculties/graduate_studies/forms/index.html). The form must be approved by the department/unit Head and submitted to the Faculty of Graduate Studies.

Declaration of full/part time status must be made prior to the end of the registration revision period in the Fall and/or Winter terms and within one (1) month of the start of the Summer term. Part-time students may revert to full-time but will not be permitted to return to part-time studies.

For every full year (12 months) a Master’s student is declared as part time they will receive an additional four (4) months in time to complete their program. For every two (2) years (24 months) a Master’s student is declared as part time they will receive an additional year (12 months) in time to complete their program. For every two (2) years (24 months) a Ph.D. student is declared as part time they will receive an additional four (4) months in time to complete their program. Retroactive status changes will not be made.

#### 1.4.2 Pre-Master’s Or Qualifying Students

In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may recommend that the student be admitted to a Pre-Master’s program of study. The Pre-Master’s program is intended to bring the student’s standing to approximately the level of an Honours graduate in the major department/unit, and to provide any necessary prerequisites for courses.
### 1.4.3 Occasional Students

A student wishing to take graduate courses with no intention of applying them toward an advanced degree at the University of Manitoba is classified as an occasional student. Occasional students must meet the same degree and grade point average entrance requirements as regular graduate students and must write final examinations in the courses taken (unless audited), but will not receive credit toward a degree. In special circumstances, an occasional student may apply for permission to proceed to a degree program and also apply for transfer, for credit, of courses previously taken in the “occasional” category.

**Note:**

1. Transfer of courses from the “occasional” category to a degree program is not automatic: request for advance credit must be made within the first year of a degree program on the “Advance Credit – Transfer of Credit” form ([http://umanitoba.ca/faculties/graduate_studies/forms/index.html](http://umanitoba.ca/faculties/graduate_studies/forms/index.html)).

2. Fees paid by a student while registered as an occasional student are not transferable, at a later date, to a degree program.

3. Registration in the occasional student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication.

4. At least 60% of coursework per academic year must be taken at the graduate level while registered as an occasional student.

### 1.4.4 Joint Masters (With the University of Winnipeg)

The University of Manitoba and the University of Winnipeg offer four (4) joint Master’s programs: History, Religion, Public Administration, and Peace and Conflict Studies. The University of Manitoba, Faculty of Graduate Studies is responsible for the administration of the joint programs, and students must complete the regular University of Manitoba application and registration forms. Students taking Pre-Master’s qualifying work for these programs register at the university where the courses are being taken.

### 1.4.5 Visiting Students

Visiting students are students who are registered at another institution who are taking one (1) or more courses at The University of Manitoba on a Letter of Permission from their home university. Visiting students must submit an online application, along with a $100.00 (CDN) non-refundable application fee, in addition to copies of transcripts from all institutions attended and a successfully completed English Language Proficiency Test from the approved list, if applicable. Applications must be submitted to the Faculty of Graduate Studies a minimum of one (1) month prior to the start of the intended term of study.

**Note:**

1. Fees paid by a student while registered as a visiting student are not transferable, at a later date, to a degree program.
2. Registration in the visiting student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication.

3. At least 60% of coursework per academic year must be taken at the graduate level while registered as a visiting student.

### 1.5. Student Accessibility

See Student Accessibility Procedure:  
http://umanitoba.ca/admin/governance/governing_documents/students/accessibility.html

### SECTION 2: Academic Performance - General

#### 2.1 General Note

**Students are responsible for ensuring that they meet all degree and program requirements.** The advisor (and if appropriate co-advisor), advisory committee, and department/unit must ensure that each student follows Faculty of Graduate Studies and department/unit guidelines and meets all program requirements. The Faculty of Graduate Studies performs a final check of Faculty of Graduate Studies minimum requirements for each student just prior to graduation. Students are cautioned, therefore, to periodically check all regulations with respect to their degree requirements. Failure to meet all the requirements will render a student ineligible to graduate.

Departments/units may make recommendations with respect to the regulations concerning minimum academic performance; however, enforcement of academic regulations rests with the Faculty of Graduate Studies. The following procedures apply to recommendations made by departments/units:

- The department/unit is responsible for informing the Faculty of Graduate Studies when a student’s performance is unsatisfactory in research or coursework and the department/unit must outline any recommended remedial action(s).
- The department/unit must notify the student of the deficiency and of its recommendation.
- If the student fails to satisfy any remedial action recommended, the student may be required to withdraw from the Faculty of Graduate Studies.

**Note:**

When a graduate student is required to withdraw from a program of study, the notation on the academic record will be: “Required to withdraw”.

A student who has been required to withdraw from a graduate program may be permitted to apply for admission to another graduate program only if the application for admission is approved by the Dean of the Faculty of Graduate Studies.

Voluntary withdrawal from a program is only permitted if the student is in good academic standing.
Recommendations of departments/units will supersede student requests for voluntary withdrawal.

## 2.2 BONAFIDE ACADEMIC REQUIREMENTS (BFAR)

The following Bona Fide Academic Requirements (BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills. Students must also meet additional requirements that may be specified for their program.

Students must meet requirements as outlined in both BFARs and Supplementary Regulation documents as approved by Senate.

Unless otherwise indicated, students may elect to complete any/all of the following requirements with or without appropriate and authorized assistive technology/aids. Students must consult Student Accessibility Services (SAS) regarding authorization for these procedures.

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<tr>
<th>BFAR Statement</th>
<th>Taught</th>
<th>Assessed</th>
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<tbody>
<tr>
<td>Student must successfully complete a co-operative experience or practicum, if</td>
<td>Master's GRAD 7030</td>
<td>GRAD 7030</td>
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<td>required by their program.</td>
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<tr>
<td>Student must successfully complete a comprehensive exam, project, studio</td>
<td>GRAD 7010</td>
<td>GRAD 7010</td>
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<tr>
<td>exhibition, or equivalent, as required by their program and determined by the</td>
<td>GRAD 7050</td>
<td>GRAD 7050</td>
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<td>assigned examining committee.</td>
<td>GRAD 7090</td>
<td>GRAD 7090</td>
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<td></td>
<td>GRAD 7200</td>
<td>Examining/Adjudication</td>
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<td>Committee</td>
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<tr>
<td>Student must produce a recorded/published thesis commensurate with degree being</td>
<td>Master's GRAD 7000</td>
<td>GRAD 7000</td>
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<td>sought.</td>
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<tr>
<td>Student must successfully defend their thesis (where required), as determined</td>
<td>Master's GRAD 7000</td>
<td>GRAD 7000</td>
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<td>by the assigned examining committee, in real-time.</td>
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<td>Student in doctoral program must complete a candidacy exam (or equivalent) as</td>
<td>GRAD 8010</td>
<td>GRAD 8010</td>
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<td>required by their program and determined by the assigned examining committee.</td>
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<tr>
<td>Student must demonstrate knowledge of the University of Manitoba's policy on</td>
<td>GRAD 7500</td>
<td>GRAD 7500</td>
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<tr>
<td>academic integrity, plagiarism, and cheating.</td>
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<tr>
<td>Student must conduct research in a safe and ethical manner, referring to their</td>
<td>GRAD 7300</td>
<td>GRAD 7300</td>
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<tr>
<td>respective ethics board and supervisor(s) to ensure respect is maintained for:</td>
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<tr>
<td>human dignity and/or animal welfare; vulnerable persons; informed consent;</td>
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<tr>
<td>justice and diversity; confidentiality and privacy; beneficence.</td>
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<td>Student must complete coursework as required by their program.</td>
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Individual unit BFARs available at: [http://umanitoba.ca/graduate_studies/](http://umanitoba.ca/graduate_studies/)

### 2.3 Academic Performance

Student progress shall be reported at least annually, (but not to exceed once every four months), to the Faculty of Graduate Studies on the “Progress Report” form ([http://umanitoba.ca/faculties/graduate_studies/forms/index.html](http://umanitoba.ca/faculties/graduate_studies/forms/index.html)).

Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the “Progress Report” form. Two (2) consecutive “in need of improvement” or an “unsatisfactory” rating will normally result in withdrawal of the student from the Faculty of Graduate Studies.

### 2.4 Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades will be required to withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course. In the event that a substitute course is used for remediation, then this must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of six (6) credit hours of coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of C or less in more than six (6) credit hours of coursework are normally required to withdraw, unless otherwise stated in the department/unit’s supplemental regulations.

Graduate students are not permitted to repeat a previously passed course.

**Note:**

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Master’s or Ph.D. program, unless otherwise stated in the department/unit’s supplemental regulations.
A summary of all actions taken administratively are to be reported, in summary form, to the Faculty of Graduate Studies Executive Committee.

2.5 Mandatory Academic Integrity Course

All students, including those in a Pre-Master's program, are required to successfully complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within their first term of initial registration.

Notes:
Students who successfully complete GRAD 7500 Academic Integrity Tutorial at the Master's level are not normally required to repeat the course at the Ph.D. level so long as no more than one (1) term separates one graduate degree program from another graduate degree program.

Failure to complete this course will result in suspension of registration privileges and a grade of “F/NP” being assigned to the course which may lead to being “Required to withdraw” from the graduate program.

Students on an exceptional/parental/regular leave of absence must register in GRAD 7500 upon return from leave if it has not already been completed.

Visiting and Occasional students are not expected to complete GRAD 7500. For further information see GRAD 7500 FAQ: http://umanitoba.ca/faculties/graduate_studies/registration/grad7500FAQ.html.

SECTION 3: General Regulations: Pre-Master's

3.1 Admission and Program Requirements

Graduates of bachelor degree programs with a minimum grade point average (GPA) of 3.0 in the last two (2) full years of university study will be considered for admission to a Pre-Master’s program. These are the minimum requirements of the Faculty of Graduate Studies. Departments/Units may specify higher or additional criteria. Admission to a Pre-Master's program does not guarantee future admission to a Master's program. As the pre-Master’s program of study is intended to bring a student's background up to the equivalent of the required four (4)-year degree, departments/units should assign to students, as part of their Pre-Master's program of study, an appropriate number of applicable upper level (3000 or 4000) undergraduate courses. Pre-Master's students are not normally allowed to register in 7000-level courses or above, with the exception of GRAD 7500, unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.

3.2 Academic Performance

3.2.1. The department/unit Head is responsible for assigning the courses and monitoring the progress of each student.

3.2.2. A minimum degree grade point average of 3.0 with no grade below C+ must be maintained to continue in a pre-Master’s program. Students who fail to maintain this standing will be required to withdraw unless remedial action recommended by the
department/unit (as described below) is approved by the Dean of the Faculty of Graduate Studies.

3.2.3. Students deficient in six (6) hours of credit or less may be permitted to write a supplemental examination (when offered in the department/unit’s supplemental regulations) in courses in which a grade of C or less was obtained.

3.2.4. Students deficient in six (6) hours of credit or less with a grade of C, D, or F in a course or courses may be permitted, if the overall average is C or better, to write one (1) supplemental examination in each course (when permitted by the department/unit’s supplemental regulations), to repeat the courses, or to take equivalent substitute courses.

Note: In exceptional circumstances, when a student is deficient in more than six (6) credit hours, the student may be permitted to repeat the Pre-Master’s year, or to write supplemental examinations (when offered), or to substitute equivalent coursework in order to make up the deficiencies.

A student may be permitted to repeat the Pre-Master’s year only once, and to remove deficiencies in grades by writing a supplemental examination or repeating courses only one (1) time for each course to a maximum of nine (9) credit hours of coursework.

If a course is repeated or a supplemental examination is written, the highest grade obtained in that course will be used in the determination of the degree GPA.

The degree GPA is cumulative in a pre-Master’s program if more than one (1) year is required to complete the course requirements.

A summary of all action taken administratively is to be reported to the Faculty of Graduate Studies Executive Committee.

SECTION 4: General Regulations: Master’s

4.1 General

Although general regulations apply to all students, individual departments/units may have additional regulations that supplement these general regulations. All such supplemental regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (http://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplemental regulations for specific details regarding admission, program requirements, progression, and completion. Individual departments/units may offer Master’s programs by one or more of the following:

- Thesis/practicum-based;
- Course-based;
- Comprehensive Exam;
- Project;
- Accredited Professional.

4.2 Diploma Programs
### 4.3 Admission

#### 4.3.1 General Criteria

Students who are eligible to be considered for direct admission to a program of study leading to the Master's degree include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.

- Graduates from first-cycle Bologna compliant degrees.

- Students who have completed a Pre-Master’s program from:
  - The University of Manitoba; or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Master’s degree program must have attained a minimum GPA of 3.0 in the last two (2) full years (60 credit hours) of study. This includes those applying for direct admission and those entering from a Pre-Master’s program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

#### 4.3.2 Pre-Master’s Programs

In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may recommend that the student be admitted to a Pre-Master’s program of study (Section 3).

The Pre-Master’s program of study is intended to bring a student’s background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master’s program.

### 4.4 Program Requirements

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**Master of Science (M.Sc.)**

For admission into the M.Sc. program, applicants are normally required to hold a Bachelor's degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head. Ultimately, acceptance must be approved by the Faculty of Graduate Studies.

**Master of Engineering (M.Eng.)**

For admission into the M.Eng. program, applicants must have a minimum of a Bachelor's degree in engineering. In exceptional cases, based on the candidate’s professional experience, i.e. holding a P. Eng., this requirement may be waived on the recommendation of the Department Head. Ultimately, acceptance must be approved by the Faculty of Graduate Studies.
In general, students must complete one of the programs of study described below for the Master's degree. However, the program of study is determined by the department/unit and may follow the department/unit’s supplemental regulations. Any single course cannot be used for credit toward more than one program.

### 4.4.1 Thesis/Practicum Route

A minimum of twelve (12) credit hours of coursework, unless otherwise stated in the department/unit's supplemental regulations, plus a thesis or practicum is required. The minimum must include at least six (6) credit hours at the 7000 level or above, with the balance of the coursework at the 3000 level or above. A maximum of twenty-four (24) credit hours of coursework is allowed unless the department/unit's supplemental regulations indicate otherwise. The student must complete the thesis/practicum at The University of Manitoba.

### 4.4.2 Course-based/Comprehensive Examination Route

A minimum of twenty-four (24) credit hours of coursework and comprehensive examination(s) is required. The minimum must include at least eighteen (18) credit hours at the 7000 level or above with the balance of the coursework at the 3000 level or above. A maximum of forty-eight (48) credit hours of coursework is allowed unless a department/unit's supplemental regulations indicate otherwise.

### 4.4.3 Accredited Professional Route

The credit hours and course requirements shall reflect the requirements of the department/unit's external accrediting body.

### 4.4.4 Language Reading Requirements

Some department/units specify a language requirement for the Master's degree. Students should check department/unit supplemental regulations regarding this requirement.

### 4.4.5 Advanced Credit

Not required.
Advance credit for courses completed prior to admission to a Master’s program will be considered on a case-by-case basis. The student’s department/unit must make a request to the Faculty of Graduate Studies by completing the “Advance Credit-Transfer of Courses” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html).

- Application for advance credit must be made within the first year of the program (see section 4.7.2 Lapse of Credit of Courses)
- No more than 50% of the required coursework for the program can be achieved using advance credit.
- A course may not be used for credit toward more than one (1) degree, diploma, or certificate.
- The student must register at The University of Manitoba for at least two (2) terms within a single academic year and must also complete the thesis/practicum/project/comprehensive exam at The University of Manitoba.

Regardless of the extent of advanced credit granted, all students are required to pay all applicable program fees.

### 4.4.6 Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree;
- may be taken at other universities while registered in a program at The University of Manitoba, provided that the credit does not exceed 50% of the minimum credit hours of coursework required.

Permission is granted in the form of a Letter of Permission which may be obtained by making an application to the Registrar’s Office (http://umanitoba.ca/student/records/leave_return/710.html); an original transcript and course equivalency must be provided.

### 4.4.7 Time in Program

The minimum time for students in the Master’s program is equivalent to two (2) terms. Completion of most programs requires more than this and students should check department/unit supplemental regulations regarding specific requirements.

The maximum time allowed for the completion of the Master’s degree is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see section 1.4.1 for information on calculating maximum time for students). Individual department/units and/or programs may have specified minimum and maximum time limits, and students should periodically check department/unit supplemental regulations regarding these specific requirements.

Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted to the Dean of the Faculty of Graduate Studies.
using the "Time Extension Request" form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html) at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit.

A student who has not completed the degree requirements within the time limit or within the time limit of the extension will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".

4.5 Student's Advisor/Co-Advisor

4.5.1 Student's Advisor

Each student should have an advisor upon entry into the program, and must have one assigned no later than one (1) term following registration. The advisor must:

- hold an appointment in the student's department/unit;
- be a member of the Faculty of Graduate Studies*;
- hold at least a Master's degree or equivalent**;
- be active in research;
- have expertise in a discipline related to the student's program.

* (http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html)

**Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case by case basis and assessed by the potential advisor’s demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.

It is the responsibility of the department/unit Head to determine whether faculty members meet these criteria, and also to report to the Dean of the Faculty of Graduate Studies on equivalency as necessary. Any exceptions or special circumstances must be recommended by the department/unit Head and approved by the Dean of the Faculty of Graduate Studies who considers each case on an individual basis.

In department/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the department/unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen.

4.5.2 Student's Co-advisor

In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies*;
- hold a Master's or equivalent**;
- be active in research;
- have expertise in a discipline related to the student's program.

Applicants are assigned an advisor at the time of admission. The advisor must hold a primary appointment with the Department of Biosystems Engineering. Where an advisor and a co-advisor are involved, at least one of the two must have a primary appointment in Biosystems Engineering.

NEW 2019-20! The student’s co-advisor no longer needs to be a member of the unit offering the program
**Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case by case basis and assessed by the potential co-advisor’s demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Master’s or Ph.D.**

The co-advisor may be identified either at the beginning of, or mid-way through, a student’s program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement.

When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor; however, both the advisor and co-advisor’s signatures are required on all documents where the advisor’s signature is required.

### 4.5.3 Student’s Advisor/Co-advisor

A student who also holds an appointment at The University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss, and complete, the Faculty of Graduate Studies Advisor Student Guidelines (ASG) prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, then the interim advisor will be required to complete the Advisor Student Guidelines. The advisor/co-advisor and the student are required to approve the agreement. If the parties cannot agree on any component(s) of the ASG, the matter should be referred to the department/unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. The Advisor Student Guidelines is to be completed again if there is a change in advisor/co-advisor or when a co-advisor is added mid-way through the student’s program.

Should, during the student’s program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred to the department/unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. It is the responsibility of the unit offering the program in which the student is studying to arrange an alternate advisor if this is appropriate and necessary.

All students should consult department/unit supplemental regulations for specific details regarding advisor/co-advisor requirements.

### 4.6 Advisory Committee

#### 4.6.1 Thesis/Practicum Route

Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during his/her research program. The advisory committee must consist of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be members of the Faculty of Graduate Studies.

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All examiners must be deemed qualified by the department/unit Head and be willing to serve. It is expected, under normal circumstances, that Advisory Committee members will possess at least a Master's degree or equivalent. Advisory committees may include one (1) non-voting guest member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit. Graduate students, Post-Doctoral fellows, and Research Assistants or Associates may not serve on graduate student advisory committees.

The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. The advisor/co-advisor is the Chair of the advisory committee. Disclosure is required if two or more committee members are in a personal relationship.

Additional specifications, if any, regarding the advisory committee are found in the department/unit supplemental regulations and students should consult these regulations for specific requirements.

### 4.6.2 Course-based or Comprehensive Examination Route

Normally, advisory committees are not required in these routes, however any appropriate specifications regarding an advisory committee can be found in the department/unit’s supplemental regulations and students should consult these regulations for specific requirements.

### 4.6.3 Accredited professional programs

Normally, advisory committees are not required in these routes, however any appropriate specifications regarding an advisory committee can be found in the department/unit’s supplemental regulations and students should consult these regulations for specific requirements.

### 4.7 Courses and Performance

#### 4.7.1 Course or Program Changes

Students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor/co-advisor (and/or advisory committee) and department/unit Head. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.

#### 4.7.2 Lapse of Credit of Courses

Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A Department or Unit may request an exception to this limit on behalf of the student. Such requests, which
will be evaluated on a case by case basis, must be accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content.

Courses completed more than ten (10) years prior to the date of awarding of a degree can not be used for credit toward that degree.

In the event that course-work is no longer considered current, students must take additional course-work (as recommended by the Department/Unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program.

4.7.3 Academic Performance

Student progress shall be reported at least annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the “Progress Report” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the “Progress Report” form. Two (2) consecutive “in need of improvement” ratings or one (1) “unsatisfactory” rating will normally result in withdrawal of the student from the Faculty of Graduate Studies.

4.7.4 Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades will be required to withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

The advisory committee may recommend remediation of failed courses.

4.7.5 Performance not related to Coursework

In some departments/units, students are required to demonstrate satisfactory academic performance in areas not related to performance in courses, such as attendance at or participation in course lectures, seminars and in laboratories and progress in research, thesis or practicum. The specific nature of satisfactory academic performance is outlined in individual department/unit supplemental regulations and students should consult these supplemental regulations for specific requirements. Unacceptable performance must be reported to the Faculty of Graduate Studies on the “Progress Report” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the department/unit Head to the Dean of the Faculty of Graduate Studies.

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in previous “Progress Reports.”

4.8 Requirements for Graduation
All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements; and
- meet the minimum and not exceed the maximum time requirements.

Individual department/units may have additional specific requirements for graduation and students should consult department/unit supplemental regulations for these specific requirements.

4.8.1 Thesis/Practicum Route

4.8.1.1 Thesis vs. Practicum

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum. The thesis or practicum will normally be written in English unless the student is studying in a program at the Université de Saint-Boniface, or departmental/unit supplemental regulations allow a different language to be used.

A practicum differs from the thesis in its emphasis on the application of theory, it is however similar in scope, span, and rigour. The practicum takes the form of an exercise in the practical application of knowledge and skill. It usually involves the careful definition of a problem, the application of appropriate knowledge and skills to the problem, and a report of the results in a manner suitable for evaluation by an examining committee. Individual department/units have specific requirements for graduation and students should consult department/unit supplemental regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the thesis research.

The thesis is developed under the mentorship of the advisor/co-advisor. Individual department/units may have specific guidelines regarding the thesis proposal and its acceptance by the student’s advisory committee and department/unit Head; students should consult department/unit supplemental regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the thesis research.

4.8.1.2 Examining Committee

The advisor/co-advisor will recommend an examining committee to the department/unit Head for approval, which shall then be reported to the Faculty of Graduate Studies on the “Master’s Thesis/Practicum Title and Appointment of Examiners” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). This form must be approved by the Dean of the Faculty of Graduate Studies at least two (2) weeks prior to the distribution of the thesis.

Under normal circumstances, the examining committee will be the same as the advisory committee unless otherwise stipulated in the department/unit’s supplemental regulations. The examining committee must consist of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be

Master of Science (M.Sc.)

A thesis proposal (approximately 20 pages) is to be prepared by the M.Sc. student in consultation with the advisor/co-advisor, usually within 12 months of registration. The thesis proposal should include a statement of the thesis topic, a review of the relevant literature, the hypotheses to be tested, the proposed research methodology, and anticipated significance of the research. The thesis proposal should be circulated to the advisory committee prior to being presented orally to the student’s advisory committee in a closed session. Unanimous approval by the advisory committee is required. If unanimous approval is not received, the thesis proposal can be revised and resubmitted.

NEW 2019-20! There is no longer a requirement for an “internal-external” examining committee member

The examining committee is normally the same as the advisory committee for M.Sc. students.
members of the Faculty of Graduate Studies. All examiners must be deemed qualified by the department/unit Head and be willing to serve. It is expected that, under normal circumstances, Examination Committee members will have a Master's degree or equivalent. The composition of, and any changes to, the examining committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. Individual department/units establish specific requirements for examination and students should consult department/unit supplemental regulations for specific requirements.

The Head of the department/unit arranges for the distribution of the thesis/practicum to the examiners. It is the duty of all examiners to read the thesis/practicum and report on its merits according to the following categories:

- Acceptable, without modification or with minor revision(s); or
- Acceptable, subject to modification and/or revision(s); or
- Not acceptable.

If two or more examiners do not approve the thesis, then the student is deemed to have failed the distribution.

Note that in the case of an advisor and co-advisor, both together have a single vote on the examining committee.

### 4.8.1.3 Oral Examination

For department/units requiring students to pass an oral examination on the subject of the thesis/practicum and matters relating thereto, the format of the oral examination is described in the supplementary regulations of the department/unit. Students should consult these supplemental regulations for specific requirements. A student has the right to an examination of the thesis/practicum if he/she believes it is ready for examination. It is the department/unit's responsibility to advise the student of any risk involved should he/she decide to proceed against the department/unit's recommendation.

All members of the examining committee are required to be present at the examination. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may participate electronically. Under no circumstances can the student or the Advisor/Co-advisor participate electronically. No recording devices will be permitted. The oral examination must be held at either the University of Manitoba Fort Garry or Bannatyne campus, or the St. Boniface Research Centre during normal business hours.

The oral examination shall be open to all members of The University of Manitoba community except in exceptional cases. The oral examination may be closed, for example, when the results of the thesis/practicum research must be kept confidential for a period of time. In such cases, the examining committee and department/unit Head shall recommend such action to the Dean of the Faculty of Graduate Studies who shall then decide whether to grant that the final examination be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies.

The oral examination will normally be held in English unless the student is studying in a program at the Université de Saint-Boniface, or departmental/unit supplemental regulations allow a different language to be used.

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**Master of Science (M.Sc.)**

The oral examination will be scheduled by the advisor/co-advisor and chaired by an academic member of the department not part of the examining committee. Students are expected to present the work in 20-30 minutes. Examining committee members are allowed two rounds of questions (not exceeding 15 minutes each). In the first round, questions are to be of a general nature related to information presented orally. Members of the audience are then given an opportunity to ask questions. Finally, examining committee members are given a chance to ask detailed questions related to the written thesis. The entire examination should not exceed 2 hours.

**Master of Engineering (M.Eng.)**

There is no oral examination for the course-based M.Eng. program.
Following completion of the examination of the thesis/practicum, examiners will consider the oral examination and the written thesis/practicum.

The examiners will also determine the nature of and procedures for approval of any revisions that will be required prior to submission of the thesis/practicum to the Faculty of Graduate Studies. The advisor/co-advisor is normally responsible for ensuring that revisions are completed according to the instructions from the examining committee.

The judgment of the examiners shall be reported to the Faculty of Graduate Studies in the qualitative terms “approved” or “not approved” on the "Thesis/Practicum Final Report" form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). Each examiner must indicate his/her opinion by his/her signature. If two (2) or more examiners do not approve the thesis, then the student is deemed to have failed the defence.

### 4.8.1.4 Failure

In the case of a failure of the thesis/practicum at the Master’s level, a detailed written report will be prepared by the Chair of the examination committee and submitted to the Faculty of Graduate Studies, who will make the report available to the student and advisor/co-advisor.

A student will be required to withdraw when the thesis/practicum has been rejected twice at the stage where:

- The examining committee reports on the merits of the written thesis;
- The defence; or
- A combination of both stages.

The examining process should be completed within one (1) month of distribution of the thesis/practicum to the examining committee.

### 4.8.2 Course-based/Comprehensive Examination Route

Students must demonstrate their mastery of their field. The specific procedures for evaluation of this mastery are stated in individual department/unit supplemental regulations. Students should consult the department/unit supplemental regulations for specific requirements.

In those department/units where comprehensive examinations are required, students should consult the department/unit's supplemental regulations for specific requirements. The results of the comprehensive examinations shall be submitted to the Faculty of Graduate Studies on the "Report on Comprehensive Examination" form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html) in the terms "pass" or "fail." No student may sit comprehensive examinations more than twice. Any student who receives a "fail" on the comprehensive examination twice will be required to withdraw from the Faculty of Graduate Studies.

### 4.9 Style and Format
The thesis/practicum must be written according to a standard style acknowledged by a particular field of study (see Appendix 1).

4.10 Deadlines for Graduation

The final requirements of the degree, in the form of the final report on the thesis/practicum (and the corrected copy of the thesis/practicum and Copyright License Declaration); comprehensive examination; M. Eng. project; or Design thesis, must be submitted to the Faculty of Graduate Studies by the appropriate deadline. For those programs that do not have a culminating exercise (thesis/practicum/comprehensive examination/M.Eng. project/Design thesis) the department/unit must forward a list of potential graduate names to the Faculty of Graduate Studies by the deadline. The deadline for each of the graduation dates is published on the Faculty of Graduate Studies website at umanitoba.ca/faculties/graduate_studies/deadlines/index.html.

4.11 Details for Submission of the Final Copy

Following the approval of the thesis/practicum by the examining committee and the completion of any revisions required by that committee, the thesis/practicum, must be submitted to the Faculty of Graduate Studies as follows:

- One digital version submitted as an e-thesis/practicum at the MSpace website (http://mspace.lib.umanitoba.ca/xmlui/login);
- Thesis/Practicum final report;
- Copyright License Declaration form (located within MSpace).

4.12 Publication and Circulation of Thesis/Practicum

Every graduate student registering in a thesis/practicum Master’s program at The University of Manitoba shall be advised that, as a condition of being awarded the degree, he/she will be required to grant a license of partial copyright to the University and to the Library and Archives Canada for any thesis or practicum submitted as part of their degree program.

Note: This license makes the thesis/practicum available for further research only. Publication for commercial purposes remains the sole right of the author.

The thesis release form, including the copyright declaration/INFRINGEMENT form, must be completed on MSpace. This and other related regulations may give rise to important questions of law, and students may need additional legal advice on the copyright laws of Canada and/or other countries. Students who wish to obtain legal advice concerning their subsequent rights are advised to do so prior to signing the agreements. Signing of the license agreements is normally done after the contents of the thesis/practicum have been delineated and the importance of copyright and/or patents fully understood and appreciated.

Publication in the above manner does not preclude further publication of the thesis or practicum report or any part of it in a journal or in a book. In such cases, an
acknowledgement that the work was originally part of a thesis/practicum at The University of Manitoba should be included.

Notes:

**Patents** – Refer to section 6 “Policy of Withholding Theses Pending Patent Applications” in this Guide.

**Restriction of Thesis/Practicum for Publication** – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be so restricted.

**Library and Archives Canada** – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.

### SECTION 5: Doctor of Philosophy General Regulations

The degree of Doctor of Philosophy (Ph.D.) is granted only upon evidence of general proficiency and of distinctive attainment in a special field. In particular, the candidate must demonstrate an ability for independent investigation, original research or creative scholarship. This is expected to be presented in a thesis with a degree of literary skill and by an oral examination wherein the candidate exhibits mastery of their field. The Ph.D. is a research degree and is not conferred by The University of Manitoba solely as a result of coursework study.

Although general regulations apply to all students, individual department/units may have additional regulations that supplement these general regulations. All such supplemental regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (http://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplemental regulations for specific details regarding admission, program requirements, progression, and completion.

#### 5.1 Admission

**5.1.1 General criteria**

Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two (2) previous years of full time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. However, the criteria for admissions into the Ph.D. program are more stringent than for Master's programs; therefore, the completion of a Master's program does not guarantee

For admission into the Ph.D. program, applicants are normally required to hold a M.Sc. degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head. Ultimately, acceptance must be approved by the Faculty of Graduate Studies.

The Department of Biosystems Engineering has a standing Graduate Studies Committee consisting of three academic members of the department that fills the role of selection committee.
admission into the Ph.D. program. Some department/units require completion of a thesis-based Master’s program prior to admission to a Ph.D. program.

### 5.1.2 Direct Admission from the Bachelor’s Honours or equivalent

With special recommendation of the department/unit concerned, applicants with an honours Bachelor’s degree or equivalent may be considered for entry to Ph.D. study. These students must be outstanding in their academic background (GPA well above 3.0 in the last two full years of undergraduate study).

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. Once admitted, these students must complete at least 24 credit hours of coursework, unless the individual department/unit’s approved supplemental regulations specify otherwise, and will be assessed Ph.D. fees for three (3) years. A minimum of 18 credit hours at the 7000 level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000 level must be at the 3000 level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

### 5.1.3 Transfer from the Master’s to the Ph.D. program

Students who have not completed a Master’s program may transfer to the Ph.D. program within the same department/unit upon the recommendation by the Head of the department/unit to the Faculty of Graduate Studies. The recommendation should be made within sixteen (16) months or four (4) terms (including Summer term) from the start of the Master’s program. The coursework completed and time spent in the Master’s program will normally be credited towards the Ph.D. program. Students must complete at least 24 credit hours of coursework, unless the individual department/unit’s approved supplemental regulations specify otherwise. A minimum of 18 credit hours at the 7000 level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000 level must be at the 3000 level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

The request to transfer from a Master’s to the Ph.D. program must be submitted to the Faculty of Graduate Studies at least one (1) month prior to the term for which the student intends to commence the Ph.D. program. The following are required when making the request:

- must indicate a request for transfer on the online Application for Admission;
- If the transfer is made within one (1) year, no additional application fee will be required;

If the transfer occurs within 12 months of the initial registration in the Master’s program, the student will be assessed Ph.D. fees for three (3) years. If the transfer occurs after 12 months, the student will be assessed Ph.D. program fees for two (2) years (as they will have already paid fees for the Master’s program). Students are cautioned that such transfers may impact on The University of Manitoba Graduate Fellowship duration.

Where a student with a Master’s degree or equivalent is initially admitted and registered in a Master’s program, that student may be transferred to the Ph.D. program within the same department/unit on the recommendation of the student’s advisor/co-advisor and Head of the department/unit, provided that follow up transfer recommendation occurs within 12 months of the initial registration in the Master’s program. In such a case, the application fee is waived and fees assessed towards the
Master’s program will be deducted from the full two (2) years of Ph.D. program fees. Transfers later than 12 months must pay an application fee and their fees will be assessed as a three (3) year Ph.D. Where a student holds a Master’s degree that would be sufficient for admission to the Ph.D. program, students must complete at least 12 credit hours of coursework, unless the individual department/unit’s approved supplemental regulations specify otherwise.

### 5.1.4 Provisional Admission to the Ph.D.

Students nearing the completion of the Master’s degree may be accepted provisionally to the Ph.D. program for a 12 month period (commencing with the first registration in the Ph.D. program). Further registration in the Ph.D. program is contingent upon completion of all requirements of the Master’s degree within the 12 months. Students must maintain continuous registration in their Master’s program until its completion. Students will require assistance from the department/unit and the Faculty of Graduate Studies to complete dual registration on the “Concurrent Curriculum Permission” form ([http://intranet.umanitoba.ca/student/records/2323.html](http://intranet.umanitoba.ca/student/records/2323.html)) in the Master's and Ph.D. program simultaneously.

### 5.1.5 Students with Disabilities

See Accommodation Policy for Students with Disabilities: [http://umanitoba.ca/admin/governance/governing_documents/students/281.html](http://umanitoba.ca/admin/governance/governing_documents/students/281.html)

### 5.2 Student’s Advisor, Co-advisor and Advisory Committee

#### 5.2.1 Student’s Advisor

Every Ph.D. student must have an advisor, appointed by the Head of the department/unit. The advisor is responsible for supervising the student’s graduate program. The advisor is the student’s first point of contact at the University of Manitoba, and therefore should be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program, and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student’s advisor also acts as a channel of communication to the student’s advisory committee, the department/unit and the Faculty of Graduate Studies.

The advisor must:

- hold an appointment in the student's department/unit;
- be a member of the Faculty of Graduate Studies*;
- hold a Ph.D. or equivalent**;
- be active in research; and
- have expertise in a discipline related to the student’s program.
5.2.2 Student’s Co-advisor

In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies*;
- hold a Ph.D. or equivalent**;
- be active in research; and
- have expertise in a discipline related to the student’s program;

*Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case by case basis and assessed by the potential co-advisor’s demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

**Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case by case basis and assessed by the potential co-advisor’s demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

The co-advisor may be identified either at the beginning of, or mid-way through, a student’s program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement.

When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor; however, both the advisor and co-advisor’s signatures are required on all documents where the advisor’s signature is required.

5.2.3 Student’s Advisor/Co-advisor

A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss, and complete, the Faculty of Graduate Studies Advisor Student Guidelines (ASG) prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor the interim
advisor will be required to complete the Advisor Student Guidelines. If the parties cannot agree on any component(s) of the ASG, the matter should be referred to the department/unit Graduate Chair, the Head of the department/unit, or the Dean of the Faculty of Graduate Studies. The Advisor Student Guidelines is to be completed again if there is a change in advisor/co-advisor or when a co-advisor is added mid-way through the student’s program.

Should, during the student’s program, the relationship between the student and advisor significantly deteriorate, the matter should be referred sequentially to the department/unit Graduate Chair, the Head of the department/unit, then to the Dean of the Faculty of Graduate Studies. It is the responsibility of the unit offering the program in which the student is studying to arrange an alternate advisor if this is appropriate and necessary.

All students should consult department/unit supplemental regulations for specific details regarding advisor/co-advisor requirements.

5.2.4 Advisory Committee

The Head of the department/unit is responsible for the establishment of an advisory committee for each Ph.D. student. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during his/her program. The advisory committee must consist of a minimum of three (3) members all of whom must be members of the Faculty of Graduate Studies (http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html). Advisory committees may, in addition, include one (1) non-voting guest member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.

It is expected that Advisory Committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies. Graduate students, Post-Doctoral Fellows, and Research Assistants or Associates may not serve on graduate student advisory committees. A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit. The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies on the “Program of Study and Appointment of Advisory Committee” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). Disclosure is required if two or more committee members are in a personal relationship. The advisor/co-advisor is the Chair of the advisory committee. Advisory committee meetings must be held at least annually, and are not intended to take the place of meetings between the student and advisor/co-advisor which should occur with much greater frequency than the advisory committee meetings.

5.3 Program of Study

As soon as possible, but no later than 24 months after a student has commenced their program, the student’s program of study should be registered with the Faculty of Graduate Studies on the "Program of Study and Appointment of Advisory Committee"
The approval of the student’s advisor/co-advisor and the Head of the department/unit are sufficient for registration. The program of study, including withdrawal from individual courses and any subsequent changes, must be approved by the student’s advisor/co-advisor, the advisory committee, and the Head of the department/unit. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.

### 5.4 Program Requirements

All students must complete one of the following programs of study for the Ph.D. degree, unless otherwise specified in the approved department/unit supplemental regulations:

- Where admission to the Ph.D. is directly from a Master’s degree, a minimum of 12 credit hours at the 7000 level or higher plus a thesis is required. Any further coursework beyond the minimum 12 credit hours at the 7000 level must be at the 3000 level or above. For those students who hold a Master’s degree, a maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.*
- Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000 level or higher with the balance of the coursework at the 3000 level or higher. For those students who do not hold a Master’s degree, a maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.*

*Unless professional accreditation requirements and/or the department/unit's supplemental regulations indicate otherwise.

### 5.4.1 Language Reading Requirements

Some department/units specify a language requirement for the Ph.D. degree. Students are advised to check department/unit supplemental regulations regarding this requirement.

### 5.4.2 Advance Credit

Advance credit for courses completed prior to admission to a Ph.D. program will be considered on a case-by-case basis. The student’s department/unit makes the request to the Faculty of Graduate Studies by completing the “Advance Credit -
Biosystems Engineering (M.Sc., M.Eng. & Ph.D.) Supplemental Regulations approved & effective Sept. 1, 2019
FGS Supplemental Regulations template updated Spring 2019
5.5 Time Limits

5.5.1 Minimum Time Limit

The minimum time requirement for the program of study for a Ph.D. degree will normally be two (2) years of study beyond the level of the Master’s degree, or three (3) years beyond the level of a Bachelor’s degree. The student may be permitted to spend one (1) of these years in an approved program of research or study elsewhere. Such permission must be approved by the Dean of the Faculty of Graduate Studies on the recommendation of the student’s advisory committee.

5.5.2 Maximum Time Limit

A student’s candidature shall lapse if he/she fails to complete the degree within six (6) years following initial registration in the Ph.D. program. For those students who transfer from the Master’s to the Ph.D., years spent in the Master’s program are counted as years in the Ph.D. program.

Ph.D. students who are declared as part-time will receive an additional four (4) months in time to complete their program for every two (2) years (24 months) they are declared as part time (see section 1.4.1) to a maximum of seven (7) years. Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted using the "Time Extension Request" form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html) to the Dean of the Faculty of Graduate Studies at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit.

A student who has not completed the degree requirements within the time limit or within the time limit of any extension that has been granted (see also sections “Extension of Time to Complete Program of Study” and “Leave of Absence”) will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be “Required to withdraw”.

5.6 Academic Performance

Student progress shall be reported at least annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the “Progress Report” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html).

Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the “Progress Report” form. Two (2) consecutive “in need of improvement” or an “unsatisfactory” rating will normally result in withdrawal of the student from the Faculty of Graduate Studies.

5.6.1 Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades will be required to remediate failed courses.

The advisory committee may recommend remediation of failed courses.
required to withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

5.6.2 Performance Not Related to Coursework

Students may be required to withdraw from their Ph.D. program for reasons of unsatisfactory performance other than those related to failing grades. These include, but are not restricted to, unsatisfactory attendance and lack of progress in research and/or thesis preparation. Unacceptable performance must be reported to the Faculty of Graduate Studies on the “Progress Report” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html). Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the department/unit Head to the Dean of the Faculty of Graduate Studies.

5.7 Academic Requirement for Graduation

A cumulative degree grade point average of 3.0 or greater is required in those courses that constitute the program of study for graduation in the Faculty of Graduate Studies.

5.8 Candidacy Examination

The candidacy examination is an absolute requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from unit to unit. The purpose of the candidacy exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analyzing, synthesizing, and communicating ideas about that material in depth.

At the time specified by the advisory committee, normally within the first year after the completion of the Ph.D. program coursework but in no case later than one year prior to expected graduation, the student must successfully complete the formal candidacy examination.

The examination is conducted according to a procedure established by the department/unit and approved by the Programs and Guidelines Committee of the Faculty of Graduate Studies. Please see the department/unit supplemental regulations for the format and composition of the examination committee for the candidacy examination. The candidacy examination must be held at The University of Manitoba.

This examination, which must be independent from the thesis proposal, may be oral, written, or both and may cover subjects relevant to the general area of the candidate's

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. Ph.D. students are expected to display increasing independence as they proceed through the doctoral program. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in the previous “Progress Report” form.

Candidacy Examination Committee: The Candidacy Examination Committee will consist of the student's Advisory Committee along with any people that the committee wishes to add for the examination. The candidacy examination is to be chaired by the Graduate Chair or Department Head.

Written Report: The PhD student is to submit to the Chair of the Candidacy Examination Committee, a written document that includes a literature review, preliminary data, preliminary data analysis, and discussion of the results in the context of the literature. The report should not exceed 50 pages (double spaced). The Chair will forward the report to the members of the Candidacy Examination Committee.

Written Examination: After reading the literature review, each member of the Candidacy Examination Committee will submit to the Chair of the Candidacy Examination Committee one or more questions to be answered by the student in an open-book, take-home examination. The PhD student will return the written answers to the Chair
research. The structure of the exam must be made known to the student well in advance of the exam. In the case where there is a required oral component, the student must be physically present.

A “pass” decision of the examiners must be unanimous. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.

The Dean of the Faculty of Graduate Studies must be informed whether the candidate has “passed” or “failed” the candidacy examination on the “Report on Ph.D. Candidacy Examination” form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html).

Any student who fails the candidacy examination twice will be required to withdraw from the Faculty of Graduate Studies.

On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.

5.9 Thesis Proposal

Some departments/units have specific procedures in place for approval of thesis proposals and students are advised to refer to the specific department/unit supplemental regulations. If departments/units require thesis proposal approval, this exercise must be independent from the candidacy examination. Regardless, the proposed thesis research must be approved by the advisory committee and, if necessary, by the Human Research Ethics Board or Animal Care Committee before the work has begun on the thesis research or project.

The thesis proposal will normally be reviewed and approved by the advisory committee within the first 12 months of the PhD program. It will consist of a maximum 10-page (double spaced) proposal including sections on objectives & sub-objectives, brief review of relevant literature, proposed methodology, and impact/significance of the proposed research.

The PhD student will give a 20-25 minute presentation on the thesis proposal. The advisory committee may ask questions of clarification or offer suggestions for modification of the research objectives and/or proposed methodology. The thesis proposal presentation should not be viewed...
### 5.10 Thesis

An essential feature of Ph.D. study is the candidate’s demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The thesis must be written in English.

The thesis must be written according to a standard style acknowledged within the candidate’s particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors).

The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the guidelines found at: [http://umanitoba.ca/faculties/graduate_studies/thesis/guidelines.html](http://umanitoba.ca/faculties/graduate_studies/thesis/guidelines.html)

### 5.11 Thesis Examination Procedures

The final examination for the Ph.D. degree proceeds in two (2) stages:

1. Examination of the candidate’s thesis by an internal and external examiner;
2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

#### 5.11.1 Formation of the Examining Committee - University of Manitoba (Internal) Examiners

The candidate’s advisor (and, if appropriate, co-advisor) is considered to be a voting member of the examining committee. All voting members of the advisory committee are expected to serve on the examining committee; any exceptions must be approved in advance by the Dean of the Faculty of Graduate Studies. All examiners must be members of the Faculty of Graduate Studies ([http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html](http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html)). It is expected that Examining Committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies. Note that in the case of an advisor and co-advisor, both together have a single vote on the examining committee.

#### 5.11.2 Formation of the Examining Committee - External Examiner

The candidate’s advisor/co-advisor, in consultation with the advisory committee, will recommend the names of three (3) distinguished scholars from outside The University of Manitoba with particular experience in the field of the thesis research and significant Ph.D. student advisory/examination experience to serve as the external examiner to the Dean of the Faculty of Graduate Studies for approval via the Thesis Submission Portal on JUMP. The recommendations should, if possible, include a **NEW 2019-20!** There is no longer a requirement for an "internal-external" examining committee member
brief CV of each of the prospective external examiners and a short statement detailing the rationale behind the recommendations, the prospective external examiners’ qualifications, including a current list of his/her scholarly publications and research activities and, importantly, their experience with graduate student education. No contact should be made with any of the prospective external examiners. If any of the recommended examiners does not meet the following criteria, specified below, a detailed explanation should be included with the rationale for the recommendation.

The external examiner must:

- hold a Ph.D. or equivalent;
- hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a faculty member at a university;
- have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to The University of Manitoba; and
- have a demonstrated record of supervising a significant number of Ph.D. students to completion, and significant recent experience with the supervision and/or examination of Ph.D. students.

The external examiner must not:

- have acted as an external examiner for a student of the same Ph.D. advisor within the previous two (2) years;
- have been associated with the candidate at any time or in any significant way in the past five (5) years, present or reasonably foreseeable future (advisor/co-advisor, colleague, teacher, co-author of published material, family member etc.); or
- be associated with the candidate’s advisor/co-advisor in any of the following ways:
  - former student;
  - research advisor/co-advisor;
  - research collaborator within the last five (5) years;
  - co-author of published material within the last five (5) years;

The Dean of the Faculty of Graduate Studies will choose the external examiner from the list provided by the candidate’s advisor/co-advisor and will make the formal invitation to the external examiner. The Dean of the Faculty of Graduate Studies shall ensure the anonymity of the external examiner until their report has been submitted.

5.11.3 Changes in the Examining Committee

The Dean of the Faculty of Graduate Studies must approve changes in the membership of the examining committee. No changes shall be made in the examining committee after the thesis is submitted to the Faculty of Graduate Studies. Should the thesis not be submitted for examination within 12 months after the appointment of the examining committee, the committee appointment will lapse and the process shall revert to 5.11.1 above.

5.11.4 Distribution of the Thesis for Examination
Ph.D. candidates must submit their thesis for distribution electronically through JUMP. Consult this link for pertinent instructions: [http://umanitoba.ca/faculties/graduate_studies/media/Thesis_Distribution_Portal.pdf](http://umanitoba.ca/faculties/graduate_studies/media/Thesis_Distribution_Portal.pdf). It is the responsibility of the Faculty of Graduate Studies to distribute the electronic version of the thesis to all examiners. The Faculty of Graduate Studies shall attempt to ensure that the thesis is distributed to examiners as soon as possible after the submission of all required documentation. The Faculty of Graduate Studies website ([umanitoba.ca/faculties/graduate_studies/deadlines/index.html](http://umanitoba.ca/faculties/graduate_studies/deadlines/index.html)) should be consulted regarding dates by which theses must be submitted.

Once the thesis has been submitted to the Faculty of Graduate Studies, neither the candidate nor the advisor/co-advisor shall have any communication with the examining committee regarding the thesis. However, should the need arise, the examiners may contact the Dean of the Faculty of Graduate Studies to discuss any issues related to the thesis.

### 5.11.5 Responsibilities of the Examiners

In general, the examiners are responsible for:

- ensuring that the thesis and the candidate meet recognized scholarly standards for a Ph.D.;
- appraising the underlying assumptions, methodology, findings, and scholarly significance of the findings of the thesis;
- ensuring that the thesis is organized, presents data and uses accepted conventions for addressing the scholarly literature in an acceptable manner;
- evaluating that the candidate has the ability to present their findings orally and demonstrate their scholarship by responding to questions and defending the thesis.

**Notes:**

1. Any potential breach of academic integrity should be reported to the Dean of the Faculty of Graduate Studies for investigation by the Vice President (Research and International).

2. Submission of previously published, peer-reviewed material in the thesis does not preclude its critical examination, either as a written document being reviewed by examiners or at the thesis defence.

### 5.11.6 Process

**Examination of the Written Thesis**

Support of the candidate's advisor/co-advisors, advisory committee, and department/unit is required before the thesis is eligible for examination. Such support must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a completed "Approval to Proceed to Examination" form. The thesis will be eligible for distribution to examiners only once this form is approved and an external examiner is secured by Faculty of Graduate Studies.
The Dean of the Faculty of Graduate Studies will request the examiners to give, within three (3) weeks of the distribution of the thesis, a detailed written report of the thesis.

The examiners will be asked to place the thesis into one of the following categories:

1. The thesis represents a distinct contribution to the candidate's field of research and is acceptable as it stands. Minor revisions to content, structure, or writing style may be required. The thesis may proceed to oral examination.

2. The thesis has merit and makes a contribution to the candidate's field; however, there are research-related concerns that have the potential to be addressed in the oral defence. The structure and writing style are acceptable or require only minor revisions. The thesis may proceed to oral examination.

3. The thesis has some merit, but is not acceptable in its current state and requires major revisions to one or more of its core components, such as research content, structure or writing style. The thesis should not proceed to oral examination.

4. The thesis is unacceptable with respect to its core components, such as research content, structure, and writing style. The thesis should not proceed to oral examination.

The candidate's advisor (and, if appropriate, co-advisor) may also wish to submit a report.

If none or one (the dissenting voice) of the Internal examiners fails the thesis (i.e. places it in categories 3 or 4 above), then the thesis may still proceed to oral defence if a passing grade is received from the External examiner. If two or more members of the Internal examining committee fail the thesis (i.e. places the thesis in categories 3 or 4 above), then the thesis fails.

If the External examiner passes the thesis (i.e., places the thesis in category 1 or 2 above), then the student can proceed to oral examination so long as not more than 1 of the Internal examiners fails the thesis (i.e., places the thesis in category 3 or 4 above). If the External examiner fails the thesis (i.e., places the thesis in category 3 or 4 above), then the candidate fails the examination.

The awarding of a passing grade by an Internal or External examiner does not preclude them from assigning a failing grade at a subsequent stage in the examination process.

In the event of a first failure, the candidate may, on support of their home department/unit, be allowed to have the thesis evaluated a second time. In this case, the Department/Unit Head shall convene a meeting of the Internal examiners of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances, this will involve additional scholarly work that the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Support of the candidate's advisor/co-advisors, examining committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through submission by the Department/Unit head of a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the
thesis. The thesis will be eligible for second distribution only once this is received by Faculty of Graduate Studies.

Two failures at any combination of written review and/or oral examination stage will normally result in the candidate being withdrawn from the Faculty of Graduate Studies.

**Reports**

The Dean of the Faculty of Graduate Studies shall provide electronic copies of all reports to each of the advisor/co-advisor, examiners, and Head of the department/unit. In the event of a failure, hard copies will be sent to each of the advisor/co-advisor, examiners, and Head of the department/unit instead of an electronic copy.

### 5.12 The Oral Examination

#### 5.12.1 Scheduling

Departments/units cannot proceed with scheduling the oral examination prior to receiving the approved Internal and External examiners report from the Faculty of Graduate Studies. The examination must be held at The University of Manitoba normally during regular business hours. It is the responsibility of the unit to ensure that all room booking arrangements are made and appropriate facilities meet minimum standards expected for a Ph.D. defence. In addition, the candidate must submit, in electronic format biographical information and an abstract of the thesis to the Faculty of Graduate Studies at least two (2) weeks in advance of the date of the oral examination.

#### 5.12.2 Attendance

The Dean of the Faculty of Graduate Studies or designate shall act as Chair of the examination committee.

The attendance of the external examiner in person at the candidate’s oral examination is encouraged. If the external examiner will not be present in person, then his/her participation electronically is expected. If the external examiner cannot participate electronically, he/she will be asked to provide questions in advance. These questions will be read to the candidate at the defence by the Chair.

All internal members of the examining committee are required to be present at the defence, unless exceptional circumstances prevent this. Under such circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) internal member may participate electronically. Consequently, no more than one (1) Internal member and the External examiner may participate electronically.

The candidate must be present in person for the examination.

Normally, the oral examination shall be open to all members of The University of Manitoba community and the general public. In exceptional cases the final oral examination may be closed; for example, when the results of the thesis research must be kept confidential for a period of time. In such cases, the examination committee and Head of the unit shall request prior approval in writing from the Dean of the Faculty of Graduate Studies. If approved, the final oral examination shall be closed to
5.12.3 Format of the Examination

The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee. If time permits the Chair, at their discretion, may allow questions from members of the audience.

5.12.4 Procedures for the Conduct of the Examination

The Chair should discuss the examination procedures with the examiners prior to the beginning of the formal examination.

The Chair will introduce the candidate and request him/her to give a concise (20 to 25 minute) oral presentation of the thesis to include a summary of the problem addressed, the results obtained, and the conclusions drawn from the study.

Following the presentation, the Chair will invite questions from each member of the examining committee, taking care to ensure that each examiner has approximately equal time for questions. The total time for questions by the examining committee must not exceed two (2) hours.

The Chair may exercise his/her discretion in allowing questions from the audience following completion of the formal examination. Once assuming the role of Chair, he/she foregoes the right to comment on the merits of the thesis whether or not he/she is an expert in the field.

5.12.5 Decision of the Committee:

Following completion of the formal examination, the candidate and audience must leave the examination room. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it. The performance of the candidate at the oral examination may reveal problems of comprehension or explanation, and the examining committee may require revisions be made to the written thesis to address these problems prior to granting final approval.

The judgement of the examiners shall be reported by the Chair to the Faculty of Graduate Studies in the qualitative terms “pass” or “fail” on the “Final Examination of the Ph.D. Thesis” form.

- Pass: the candidate has satisfactorily presented the thesis rationale, methodology, findings, and conclusions to the general satisfaction of the examining committee. Notwithstanding this, stylistic, grammatical, and content revisions to the thesis may be required. Normally, the advisor/co-advisor is charged with ensuring that any revisions are satisfactorily completed. Under some circumstances, the entire examining committee may wish to ensure any required revisions are completed satisfactorily.
Regardless, those examiners in agreement must indicate, by their signatures, concurrence with the passing grade.

- **Fail:** the candidate has failed to adequately orally present the thesis rationale, methodology, findings, and/or conclusions, or to satisfactorily respond to questions posed related to the thesis. Failure may also arise because of defects in conception, methodology, or context. Those examiners in agreement must indicate, by his/her signature, concurrence with the failing grade.

If either the external examiner or two (2) or more internal examiners indicate a failure, then the candidate fails the examination. In this case, the Chair must submit a copy of the report, including written detailed reasons for the decision, to the candidate, all members of the examining committee, and the Dean of the Faculty of Graduate Studies.

In the case of a first failure of the oral defence, the candidate may, on support of their home department/unit, be allowed to have the thesis evaluated a second time. In this case, the Department/Unit Head shall convene a meeting of the Internal members of the examining committee and the student’s advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances this will involve additional scholarly work which the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Support of the candidate's advisor/co-advisor, advisory committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a new completed “Approval to Proceed to Examination” form, accompanied by a detailed summary of the changes made to improve the thesis, if any. The thesis will be eligible for second distribution to Internal and External examiners only once this is received by FGS.

Candidates whose thesis is failed twice at the written review and/or oral examination stage will normally be withdrawn from the Faculty of Graduate Studies.

### 5.13 Graduation

The candidate will be recommended for the Ph.D. degree upon receipt by the Faculty of Graduate Studies of favourable reports by the thesis examining committee, a corrected copy of the electronic version of the thesis submitted to MSpace, Copyright Declaration License and final approval, and providing all other degree requirements have been satisfied.

**Patents**—Refer to section 6 “Policy of Withholding Theses Pending Patent Applications” in this Guide.

**Restriction of Theses for Publication**—In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after the submission of the digital version of a thesis to The University of Manitoba. The Dean shall determine for what period, if any, access will be so restricted.
5.14 Student Withdrawal

A student will be required to withdraw when the Ph.D. thesis has been rejected twice at the stage where:

a) The internal examining committee reports on the merits of the written thesis;
b) The external examiner reports on the merits of the written thesis;
c) The oral examination; or
d) A combination of any of these stages.

SECTION 6: Policy of Withholding Thesis Pending Patent Applications Content or Manuscript Submission

In 1970, The University of Manitoba Board of Governors and Senate approved a policy on accepting research grants from outside agencies. This policy defined the right of agencies to defer release of information and thus ensure freedom of publications for research findings of University personnel. Occasionally, the University may also wish to restrict the release of a thesis pending patent application. For additional details, see The University of Manitoba governing document: http://umanitoba.ca/admin/governance/governing_documents/community/235.html

This situation may arise in the two (2) circumstances defined below, both of which are governed by the same set of regulations:

1. Where a research project is known to contain patentable items as defined in the research contract, then it is the responsibility of the advisor/co-advisor to give written information of the restrictions on publication to the student prior to the start of the thesis research. If the student agrees to carry out the research, then the regulation given below will apply.
2. Where a patentable item is found during the course of research, then the advisor/co-advisor and the student may make application for patent rights through the University Patent Committee, and the following regulation will apply concerning the release of the thesis.

Regulations Concerning Release of a Thesis during Application and Negotiation for Patents

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor/co-advisor and the student, the Dean will retain the thesis for a period up to one (1) year.

Regulations Concerning Release of Thesis Pending Manuscript Submission

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor and the student, the Dean will retain the thesis for a period up to one (1) year.

In exceptional cases, not covered by the regulation concerning patents, where adequate causes can be shown to delay publication, the student and advisor/co-
advisor may request in writing that the Dean of the Faculty of Graduate studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be so restricted.

SECTION 7: Extension of Time to Complete Program of Study Content

All requests for extensions will normally be dealt with administratively and reported, in summary form, to the Executive Committee of Graduate Studies for information. The student must complete the "Time Extension Request" form (http://umanitoba.ca/faculties/graduate_studies/forms/index.html) and submit it to their major department/unit for recommendation to the Faculty of Graduate Studies at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by the Faculty of Graduate Studies on a case by case basis.

Requests for extension must be accompanied by a realistic detailed timeline that has been agreed to by the student and advisor/co-advisor and endorsed by the department/unit Head. The extension time requested must closely reflect the time required to complete the program.

The normal time granted for extensions is four (4) to eight (8) months. More than one (1) extension period may be granted, however the total approved for all extensions will not normally exceed one (1) year.

Section 8: Leaves of Absence

For International Graduate Students:

To determine how applying for a Leave of Absence may affect your immigration status with Immigration, Refugees and Citizenship Canada, please consult with an International Student Advisor at the International Centre (http://umanitoba.ca/international/) prior to completing your Leave of Absence application with your department/unit.

8.1 Regular Leave

A regular leave is intended to allow students to meet responsibilities/plans related to family, travel or employment and circumstances not covered by the parental or exceptional leaves. At the student’s request, the Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted a leave of absence for a period of time not to exceed one (1) year. While on a regular leave of absence, a student is not expected to be actively engaged in their program of study or thesis research work. A student on a regular leave of absence is required to maintain continuous registration. A student on a regular leave of absence will not be assessed program fees, if any are owing, during the period of the leave; however, the appropriate continuing fee will be assessed.* Any program fees deferred as a result of a regular leave will be assessed when the student returns from leave. A regular leave of absence status does not extend time limits as outlined in Faculty of Graduate Studies regulations.

Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.
8.2 Exceptional Leave

In exceptional circumstances for medical or compassionate reasons (e.g. the need to care for an ailing family member), at the request of the student the Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted an exceptional leave of absence for a period of time not to exceed one (1) year. Supplemental documentation should support the requested dates of the leave. Exceptional leaves must correspond with the start and end of (an) academic term(s). While on an exceptional leave of absence, a student is not permitted to be engaged in their program of study or thesis research work, and would not be required to maintain continuous registration or pay tuition fees. In addition, the leave period would not be included in the time period allowed for the completion of the degree. This leave is not intended to cover circumstances related to travel, employment or financial concerns.

**Note:** At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

8.2.1 Fees

Students are not expected to pay fees for the term in which they have been granted an exceptional leave. Upon return from the exceptional leave, students will be assessed fees as determined by the Registrar’s Office.

8.3 Parental Leave

A graduate student who is expecting a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request for a parental leave should be made through the department/unit, to the Faculty of Graduate Studies for a period of time not to exceed one (1) year. Supplemental documentation should support the requested dates of the leave. Parental leaves must correspond with the start and end of (an) academic term(s). While on leave of absence for parental reasons, a student is not permitted to be engaged in their program of study or thesis research work. The leave period is not included in the time period allowed for completion of the degree.

**Note:** At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

8.3.1 Fees

Students are not expected to pay fees for the term(s) in which they have been granted a parental leave. Upon return from the parental leave students will be assessed fees as determined by the Registrar’s Office.

All applications for Leaves of Absence must be submitted on the "Leave of Absence" form available at: [http://umanitoba.ca/faculties/graduate_studies/forms/index.html](http://umanitoba.ca/faculties/graduate_studies/forms/index.html).
8.4 Awards and Leave of Absence

Students granted an exceptional or a parental leave will retain the full value of a University of Manitoba Graduate Fellowship or other award whose terms and conditions are established by the Faculty of Graduate Studies. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time.

**Note:** Other awards will be paid according to the conditions established by the donor or granting agency.

8.5 Graduate Student Vacation Entitlement

Students are entitled to 21 calendar days of vacation over a twelve (12) month period.

- For the purposes of calculating vacation entitlement, the academic year means the period from September 1 to August 31.
- Vacation entitlement will be prorated for the portion of the year in which a student is registered.
- Any vacation time taken during an official closure of the University is not included as part of the 21 calendar day vacation entitlement. In addition, attendance at academic conferences shall not be considered vacation time.
- Student vacation requests should have minimal impact on the student's research, coursework, and other obligations to the University. Any requests provided ahead of time and within these guidelines will not be unreasonably denied.
- Should a conflict arise between a student's vacation request and a supervisor's expectations, the Department/Unit Head (or designate) shall make a final determination.

SECTION 9: Appeals – Procedures and Guidelines

9.1 General

Students who disagree with a decision have access to appeal routes as laid out by various Faculty of Graduate Studies and University of Manitoba appeal procedures. Student appeals may be limited by the scope of the inquiry available at each level and category of appeal, as well as by the time limitations for submission of appeals.

A further limitation is that the Faculty of Graduate Studies rules and regulations, established to uphold the academic rigour of the University of Manitoba, are generally not subject to appeal unless an appeal route is otherwise stipulated. In situations where no appeal route is available, a student may make a written request to the Dean of the Faculty of Graduate Studies.

Students are referred to the appeals section of the University of Manitoba Governing Documents ([http://umanitoba.ca/admin/governance/governing_documents/index.html](http://umanitoba.ca/admin/governance/governing_documents/index.html)) for further details.

For students registered in Joint Master's Programs (University of Manitoba and University of Winnipeg) there is a different process for handling academic and disciplinary appeals than for University of Manitoba students in regular programs (not Joint Programs). This process is outlined in the Joint Master's Program Governing...
9.2 Definitions

- **“Appellant”** – the graduate student appealing a decision affecting the student’s own admission to, academic standing in, awards from or disciplinary action by a department/unit or the Faculty of Graduate Studies;
- **“Appeal Panel”** – a panel convened from the members of the Faculty of Graduate Studies Appeals Committee by the Executive Committee of the Faculty of Graduate Studies empowered to deal with appeals stemming from decisions of departments/units or the Faculty of Graduate Studies, or individuals designated to make such decisions;
- **“Unit”** – the department/unit council, or appeal body, whose decision is being appealed. This is understood to include decisions taken by individuals or committees acting in the name of the department/unit and also to the supplementary regulations pertinent to a department/unit’s operation which have been approved by the Faculty of Graduate Studies;
- **“Respondent”** – a representative of the department/unit or the Faculty of Graduate Studies designated by the department/unit Head/Dean of the Faculty of Graduate Studies to represent the department/unit or Faculty of Graduate Studies.

9.3 Types of Appeal

There are several areas of appeal which are open to appellants:

- admission;
- academic;
- discipline;
- administration (e.g. fee appeals).

In all cases, appeals should be directed to the Dean of the Faculty of Graduate Studies. A decision of the Faculty of Graduate Studies Appeal Panel is appealable only to the Senate Committee on Appeals or the University Discipline Committee, as appropriate. In all cases an appellant shall have the option of being registered in, and undertaking the responsibilities of, their program, until such time as they have exhausted the university appeal process or the appellant decides not to appeal further, whichever comes first.

9.4 Admission Appeals


9.5 Academic Appeals

9.5.1 Composition
Faculty members or students are disqualified from participating on an Appeals Panel if they:

- holds any academic appointment in the department/unit in which the appellant is registered;
- is/was a student in the department/unit in which the appellant is registered;
- was, as an individual, or as a member of a committee or board, responsible for making the decision being appealed.

**Note:** All members of an Appeal Panel shall participate in all of the deliberations essential for the determination of the matter in dispute. If, in the course of hearing an appeal, a member is not present at the commencement of the hearing or a member cannot continue, the Panel may elect to proceed in the absence of that member. If more than one (1) member is not present at the commencement or cannot continue, the Appeal Panel must adjourn.

### 9.5.2 Consideration

Appeal Panels will consider appeals:

- stemming from a decision of a department/unit on academic matters (e.g. failure in a course) only after they have been dealt with by the appropriate department/unit-level appeal process (if any), as is outlined in its supplementary regulations;
- stemming from a decision of the Faculty of Graduate Studies following the recommended action of a department/unit (e.g., qualifying examinations, candidacy examinations, thesis proposals, thesis examinations), only after they have been dealt with by the appropriate department/unit-level appeal process (if any), as outlined in its supplementary regulations;
- stemming from a decision of the Faculty of Graduate Studies.

In all cases, appeals should be directed to the Dean of the Faculty of Graduate Studies. A decision of the Appeal Panel is appealable only to the Senate Committee on Appeals (see [http://umanitoba.ca/admin/governance/governing_documents/students/senate_committee_on_appeals_policy.html](http://umanitoba.ca/admin/governance/governing_documents/students/senate_committee_on_appeals_policy.html)).

### 9.5.3 Grounds for an Academic Appeal

The Appeal Panel shall only consider an appeal if there is some evidence that:

- the department/unit or the Faculty of Graduate Studies failed to follow the rules of natural justice;
- the department/unit or the Faculty of Graduate Studies failed to follow procedures;
- a department/unit or Faculty of Graduate Studies regulation has been unfairly or improperly applied, or has become inapplicable through lapse of time;
- there are documented mitigating circumstances (e.g. medical, compassionate);
- there is apparent conflict between a Senate Regulation, a Faculty of Graduate Studies policy and/or a department/unit regulation.
### Note:
It shall be the responsibility of the appellant to indicate clearly and specifically the grounds warranting consideration of the appeal.

### 9.5.4 Academic Appeal Deadlines

#### 9.5.4.1 Appeal of Faculty of Graduate Studies Decision:
An appeal of action taken by any department/unit, committee, administrator or faculty member within the Faculty of Graduate Studies must be submitted in writing by the appellant to the Dean of the Faculty of Graduate Studies within fifteen (15) working days of the date from the date that the appellant was informed in writing of the action to be appealed.

#### 9.5.4.2 Appeals to Senate:
As per the University of Manitoba Governing Documents: Students: Policy: Appeals Procedures (http://umanitoba.ca/admin/governance/media/Senate_Committee_on_Appeals_Procedures_-_2014_11_05_RF.pdf), appeals to the Senate Committee on Appeals shall be filed with the University Secretary within twenty (20) working days after the mailing of the notice of decision from which the appeal is made.

### 9.5.5 Academic Appeals Process

#### 9.5.5.1 Documentation
Upon receipt of a formal appeal the Dean of the Faculty of Graduate Studies may, at his/her discretion, consider the appeal or forward it to an Appeal Panel.

If the Dean considers the appeal, the student shall be informed of the outcome, in writing.

The appellant may appeal the Dean’s decision to the Faculty of Graduate Studies Appeals Committee, within fifteen (15) working days of the date of the letter of decision.

An Appeal Panel will be struck, and a meeting set, by the Faculty of Graduate Studies to determine whether the appellant has grounds to proceed to a Hearing. If the Appeals Panel determines that there are no grounds, a Hearing will not take place and the appellant will be notified in writing. If the Appeals Panel determines that there are grounds, the appellant will be notified and a Hearing will be scheduled.

If the Appeals Panel determines that there are grounds, the Faculty of Graduate Studies shall inform the appropriate department/unit head (or designate) of the nature of the appeal and request that he/she be available to respond, along with the Faculty of Graduate Studies Associate Dean, at the Hearing. The respondent(s) will be requested to provide a single letter to the Chair of the Appeals Panel no later than ten (10) working days prior to the hearing in response to the appellant’s appeal.

All documentation that the Appeal Panel will consider shall be made available through the Faculty of Graduate Studies to both the appellant and the respondent(s) at least one (1) week in advance of the hearing with notification of the specific time and location of the hearing. No additional materials should be presented at the time of the hearing.
hearing. In the case where a request is made to submit additional materials, the Chair may postpone the hearing and allow no more than ten (10) working days for the other party to respond to the new materials.

9.5.5.2 Hearing

The appellant and respondent shall have the right to appear before the Appeal Panel and to call witnesses that he/she wishes to appear before the panel. It is the responsibility of the party calling witnesses to ensure that the witnesses are informed of the date and time of the hearing. The Dean of the Faculty of Graduate Studies shall be notified not less than four (4) working days prior to the hearing of the names of all witnesses that are to be called and shall inform the other party.

The appellant shall be advised by the Dean of the Faculty of Graduate Studies of the right to appear in person or to be represented by the student advocate, a fellow student or other full-time member of the University community not receiving payment for appearing, or working for legal aid.

In addition, if the appellant wishes, one (1) member of their immediate family, and a lawyer, may be present, but only as observers who do not participate. The Dean of the Faculty of Graduate Studies must be notified of any persons to be accompanying the appellant at least four (4) working days prior to the hearing.

Hearings shall be held in closed session unless at least one (1) party requests an open hearing and all parties to the appeal agree to the request. During the hearing, the appellant or the respondent may request a change in the open or closed nature of the hearing, at which time the Appeal Panel shall determine its procedures.

As the first item of business in dealing with any appeal, the Appeal Panel shall convene (in closed session) to consider whether:

- the Hearing should be an open or closed session;
- whether there are sufficient grounds to proceed with the Hearing;
- whether the Panel has jurisdiction to determine the matter at hand.

If necessary, the Appeal Panel may hear submissions from either party on any of these points. Normally, the appellant and the respondent will be present during the presentation of the other’s case.

When an Appeal Panel determines that there are insufficient grounds or that it lacks the jurisdiction to proceed with an appeal hearing, it shall report its reasons to the Dean of the Faculty of Graduate Studies.

Both the appellant (and/or representative) and respondent(s) (and/or representative) will be invited to make opening statements, including calling any witnesses. These statements will be subject to questioning by members of the Appeal Panel and cross-examination by the other party. Both the appellant (and/or representative) and respondent(s) (and/or representative) will be invited to make closing statements at which point no new information may be introduced.

The Appeal Panel may request either the appellant or the respondent(s) to provide additional information, or of its own volition call additional witnesses, before reaching a decision. This should be accompanied by a statement that the parties have a right to be made aware of the Panel’s request for information and the results thereof.
All parts of the meeting required by the Appeal Panel to deliberate or determine resolution of the appeal shall be held in camera.

### 9.5.5.3 Disposition

The Chair of the Appeal Panel shall inform the Dean of the Faculty of Graduate Studies in writing of the disposition of the appeal, the reasons for the decision, and any actions that may result. The Dean of the Faculty of Graduate Studies shall, in turn, inform the appellant and the department/unit in writing of the disposition of the appeal, the reasons for the decision and any actions that may result. The further right of appeal to the Senate Committee on Appeals should be acknowledged, along with any relevant time limits. The Dean of the Faculty of Graduate Studies may inform the department/unit of any recommendations brought forward by the Appeal Panel.

### 9.6 Discipline Appeals

The specific jurisdiction of each of the Disciplinary Authorities is outlined in:

| Table 1: Jurisdiction of Disciplinary Authorities for Student Academic Misconduct |
| Table 2: Jurisdiction of Disciplinary Authorities for Student Non-Academic Misconduct |
| Table 3: Disciplinary Actions and Disciplinary Authorities |

(http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html)

If the appeal is from a decision of the Dean of the Faculty of Graduate Studies, the appeal statement shall be delivered to the Dean of the Faculty of Graduate Studies on behalf of the Local Discipline Committee (also commonly referred to as the “L.D.C.”) on behalf of the Local Discipline Committee (also commonly referred to as the “L.D.C.”)

If the appeal is from a decision of the L.D.C., the official statement shall be delivered to the Secretary of the University Discipline Committee (U.D.C.) with a copy to the Dean of the Faculty of Graduate Studies.

### 9.6.1 Discipline Appeal Deadlines

If a student wishes to appeal a decision, the notice of appeal must be delivered in writing to the appropriate person(s) within ten (10) working days of the student being notified of the decision the student intends to appeal.

### 9.6.2 Appeal of Disciplinary Action

When the appeal is against a disciplinary decision made by the Faculty of Graduate Studies, the appeal routes and procedures as outlined in the following shall prevail:

Student Discipline Appeal Procedure
(http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html)

The student shall clearly indicate in the notice of appeal whether they are appealing the decision on:
(a) the finding of facts;
(b) the disposition determined by the disciplinary authority; or
(c) both (a) and (b).
9.7 Fee Appeals

Please refer to the Registrar’s Office webpage on fee appeals: [http://umanitoba.ca/student/records/fees/830.htm](http://umanitoba.ca/student/records/fees/830.htm). To initiate the Fee Appeal procedure, the student completes a Fee Appeal form, available online or in the Registrar’s Office, 400 University Centre.

9.8 Term Work Appeals:

Students are encouraged to discuss matters relating to grading of term work with their instructor in the first instance. Further appeals of grades on academic term work shall be directed, by the appellant, to the department/unit responsible for the course within ten (10) working days after the grades for term work have been communicated to students. Following receipt of the appropriate appeal form and evidence of payment of the refundable appeal fee, the department/unit shall consider the appeal and provide a decision within fifteen (15) working days. Please refer to [http://umanitoba.ca/student/records/grades/690.html](http://umanitoba.ca/student/records/grades/690.html).

9.9 Grade Appeals

Please refer to the Registrar's Office webpage on grade appeals: [http://umanitoba.ca/student/records/exams_grades_hub.html](http://umanitoba.ca/student/records/exams_grades_hub.html). To initiate the Grade Appeal procedure, the student completes a Grade Appeal form, available online or in the Registrar's Office, 400 University Centre.

9.10 Assistance with Appeals

The Office of Student Advocacy, 520 University Centre, [http://umanitoba.ca/student/advocacy/](http://umanitoba.ca/student/advocacy/), provides information and assistance to students regarding all appeal processes. It is strongly recommended that students contact the Office of Student Advocacy to assist them with any appeal they are considering.

APPENDIX 1: Thesis/Practicum Types

A student/candidate may present a thesis/practicum in one of two acceptable formats:

- Regular style; or
- Manuscript/grouped manuscript style

The type of thesis/practicum must be approved by the advisory committee and comply with all regulations of the Faculty of Graduate Studies and any supplemental regulations of the unit.

1.0 Regular Style

1.1 Prefatory Pages

1.1.1 Title Page

The title page should contain the following information:
Biosystems Engineering (M.Sc., M.Eng. & Ph.D.) Supplemental Regulations approved & effective Sept. 1, 2019  
FGS Supplemental Regulations template updated Spring 2019

- the title of the thesis/practicum;
- the name of the University;
- the degree for which the thesis/practicum is submitted;
- the name of the department/unit;
- the full name of the author; and
- the copyright notation ©.

The title must be a meaningful description of the content of the research. The author’s name should be in full, identical to the name under which they are registered and be consistent on all other documents. A sample title page can be found at: http://umanitoba.ca/faculties/graduate_studies/media/ThesisSampleTitlePage.pdf.

<table>
<thead>
<tr>
<th>1.1.2 Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>The abstract is expected to provide a concise, accurate account of the thesis/practicum. Abstract maximum length is 150 words for a Master’s and 350 words for a Ph.D. An abstract should contain a statement of the problem, methods, results, and conclusions.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>1.1.3 Acknowledgements</th>
</tr>
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<tbody>
<tr>
<td>The content of this single page is left to the discretion of the author. For example, the page may make reference to the student/candidate’s advisor/co-advisor and advisory committee, to other individuals who have provided invaluable assistance to the development of the thesis/practicum, and to sources of financial assistance or other support.</td>
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<tr>
<th>1.1.4 Dedication</th>
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<td>A single page pertaining to a dedication is allowed.</td>
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</table>

<table>
<thead>
<tr>
<th>1.1.5 Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>This must list and provide page references to all elements of the thesis/practicum. The numbering and formatting must be identical to the way the material appears in the text. Page numbers should be right justified.</td>
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<tr>
<th>1.1.6 List of Tables</th>
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<tbody>
<tr>
<td>This should immediately follow the Table of Contents and be of the same format. The list must include the number, name and page number of each table.</td>
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<table>
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<tr>
<th>1.1.7 List of Figures</th>
</tr>
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<tbody>
<tr>
<td>This should immediately follow the List of Tables and be of the same format as the Table of Contents. The list must include the number, name and page number of each figure.</td>
</tr>
</tbody>
</table>
1.1.8 List of Copyrighted Material

On occasion students/candidates include images, figures, photos and other materials from copyrighted sources. Written permission from the copyright holder is required. This should follow the List of Tables and follow the same format as the Table of Contents. For further information on copyright see: http://umanitoba.ca/faculties/graduate_studies/thesis/copyright_permission.html.

1.2 Format

1.2.1 Styles

The thesis/practicum should be written in a standard style manual that has been recommended by the department/unit. Manuals recommended by the Faculty of Graduate Studies include but are not limited to:

- American Psychological Association, Publication Manual of the American Psychological Association;
- Kate L. Turabian, A Manual for Writers of Term Papers, Theses and Dissertations;
- The Modern Language Association of America, MLA Handbook for Writers of Research Papers; and
- University of Chicago Press, The Chicago Manual of Style;

Students should always use the latest edition available. If there is a conflict between the instructions in this booklet and the style manual chosen, the former should be followed.

1.2.2 Spelling

Canadian, British or American spelling is acceptable, but one style must be used consistently throughout the document.

1.2.3 Format

Double space all text material; footnotes and long quotations may be single spaced. The entire thesis/practicum must be in the same text font, style, and size. Font size should be no less than 12 pt Times Roman. Full justification of the text is not required.

1.2.4 Margins

It is imperative that the specified margins be observed throughout the thesis/practicum. Leave at least a one inch (1.0") margin from the top, bottom, left, and right hand edges of the paper. These margins apply to all material, including appendices, diagrams, maps, photographs, charts, tables, etc.

1.2.5 Page Numbers
Each page in the thesis/practicum must be numbered consecutively. Illustrative pages and appendices must also be numbered. Roman numerals should be used for the prefatory pages. The remaining pages of the thesis/practicum, beginning with the introduction (Chapter One) should be numbered consecutively in Arabic numerals.

### 1.3 Footnotes, References and Appendices

Instructions in the style manual recommended by the department/unit should be followed. Regardless of which style manual is used, format selected must be consistent.

### 1.4 Figures, Illustrations, Photographs and Design Drawings

#### 1.4.1 Illustrative Material

All illustrative material must be consistent throughout the thesis/practicum. All figures, illustrations, photographs and drawings must be numbered consecutively in Arabic numerals and accompanied with a title. The material should appear as soon as possible after as it is mentioned in the text. All original materials should be of high quality, with sharp and clear images.

#### 1.4.2 Layout of Tables and Figures

Each table and figure must have a number and title. The number and title should appear at the top of the table or figure. The title of the table or figure should be as short as possible and indicate the major focus of the material within the table or figure.

### 1.5 Additional Materials

#### 1.5.1 Consent and Access to Information Forms

Sample copies of consent forms that were used to obtain consent from participants to take part in the information gathering procedures for the thesis/practicum must be included in an Appendix. Any personal information must be omitted from the submitted form.

In some cases, approval from an agency, institution or corporation may have been required before the information gathering procedures could proceed. The original approval form for access should be retained by the student with a copy provided to the Faculty of Graduate Studies upon completion of the thesis/practicum.

#### 1.5.2 Use of Copyrighted Material

If the thesis/practicum includes copyrighted material (images or more than a reasonable extract (according to the Copyright Act) of another person's work), permission must be obtained from the copyright holder. A “Sample Permission Letter” is available on the Copyright Office website (http://umanitoba.ca/copyright/copyright_basics.html). In some cases, copyright holders prefer to use their own permission forms and/or will provide their permission electronically. Both of these are acceptable by the Faculty of Graduate Studies.

Note that obtaining permission may take a considerable amount of time and this must be taken into consideration when meeting a thesis/practicum submission deadline.
reference to written permission having been obtained must be included under the image or text. The reference should also include the date the permission was granted, and the name/title of the copyright holder(s). The original form(s) signed by the copyright holders should be retained by the student with a copy provided to the Faculty of Graduate Studies at the completion of the thesis/practicum.

The thesis/practicum cannot be accepted by the Faculty of Graduate Studies if permission has not been obtained. It is important that the student and their advisor(s) ensure that the permission has been granted. In some cases, the copyright holder cannot be located or the cost is prohibitive to using the text or image. In these situations, the text or image may have to be omitted from the thesis/practicum.

Subsequently, information on where the reader can locate the image or text should be included, such as the URL, title of book/journal, volume and issue number, page number, publisher, and date of publication. A description of the purpose or significance of the text or image should be provided.

For further information on copyright see: [http://umanitoba.ca/admin/vp_admin/ofp/copyright/index.html](http://umanitoba.ca/admin/vp_admin/ofp/copyright/index.html)

### 2.0 Manuscript/Grouped Manuscript Style

A thesis/practicum may comprise a paper, or collection of papers, which are, or are about to be, published. The number of papers that comprise this style of thesis/practicum will be determined between the student and the advisory committee. The formatting of the thesis/practicum must be consistent throughout the thesis/practicum and the thesis/practicum cannot merely consist of several papers or articles bound within the one document.

Publication, or acceptance for publication, of research results prior to the presentation of the thesis/practicum does not supersede the evaluation of the work by the examination committee (i.e. does not guarantee that the thesis/practicum will be found acceptable). Examiners may specify revisions regardless of the publication status. The thesis/practicum must follow the same prefatory information (1.1), spelling, formatting margin requirements, page numbering (1.2), footnotes and appendices (1.3), figures, illustrations photographs and drawings (1.4) and any additional material (1.5) as those outlined above.

There must be an introductory chapter to the entire thesis/practicum which includes its own bibliography. The collection of papers or articles must contribute toward the overall theme that represents the thesis/practicum work and must be smoothly integrated into the flow of the thesis/practicum to produce a unified document. This may require changes or additions to, and re-writing of, any work which has been previously published.

The thesis/practicum must contain connecting text between the different chapters providing logical links to allow the integration of the information. **These connecting sections are mandatory.** Not including these sections may compromise the ability of the examiners to evaluate the thesis/practicum and accordingly there may be subsequent potential consequences.

The thesis/practicum must contain a concluding chapter that includes a discussion on how the thesis/practicum, with its findings, provides a distinct contribution to knowledge in the research area.

In the case of multi-authored papers, the nature and extent of the student/candidate’s contribution, and those of the other authors, must be explicitly specified in a section entitled “Contributions of Authors” in the “Preface” of the thesis/practicum. The advisor/co-advisor, by signing the thesis/practicum submission form, attests to the
accuracy of these statements and will be asked to reaffirm at the oral defence in the case of a doctoral thesis.