

THE UNIVERSITY OF BRITISH COLUMBIA



DEPARTMENT OF MEDICAL GENETICS

MASTER OF SCIENCE THESIS DEFENCE GUIDELINES

1. OVERVIEW

The Faculty of Graduate and Postdoctoral Studies (G+PS) provides graduate students with a comprehensive guide, "[Dissertation & Thesis Preparation](#)," and other resources for students to assist them with resources for [thesis preparation and checking](#) when writing their Master of Science (MSc) thesis. In addition, the Medical Genetics (MEDG) Graduate Program has set program-specific guidelines for the MSc thesis content and defence procedures, and schedules the defence.

1.1. G+PS REQUIREMENTS

Scope of the MSc thesis

A MSc thesis must demonstrate that the MSc student knows the background and principal works of the research area and can produce significant scholarly work. It should contain some original contribution whenever possible.

Preparation, Formatting, and Submission of the MSc thesis

- G+PS sets the thesis [basics](#), [formatting](#), and [final thesis submission](#) requirements for MSc students in all UBC graduate programs. Student preparing to write their MSc thesis should review all these guidelines when beginning to write their MSc thesis.
- MSc students can forward a draft MSc thesis to G+PS for a [pre-review](#) early in the preparation stage; and again when the MSc thesis is nearly ready for examination.

1.2. MEDG GRADUATE PROGRAM REQUIREMENTS

- The length of a MSc thesis in MEDG is usually 60–125 pages including figures and references. The MSc student must explain their contribution on every figure in their thesis. Students are advised to review recent MEDG MSc theses, which are available on UBC's theses repository, [cIRcle](#).
- MSc students are required to hold an exit seminar which is scheduled prior to the defence, usually 1-3 months before. The exit seminar is to be advertised to the MEDG community through the 'Friday Email'. Students may schedule either an in-person or videoconferencing meeting as their exit seminar venue.

2. TIMELINES AND PROCESS

Sample Timeline and Overview for MSc Thesis Completion and Defence

The overall time to complete writing, revisions, and defence is usually 4-6 months; a suggested timeline follows. In particular, as outlined below, MSc students should schedule approximately 3 months for the final stages (steps 3-8 in schedule below), which includes editing the draft thesis, scheduling and defending the thesis, and submitting the final MSc thesis to G+PS.

Please see the MEDG [Guidelines and Forms](#) webpage for all required forms.

	Approximate Time Required	Action (all actions by MSc student unless noted)
Step 1	<i>Varies</i>	<ul style="list-style-type: none"> Obtain permission from MSc student's Supervisory Committee to write draft MSc thesis. Forward the Committee Meeting Report stating approval to write-up to the MEDG Graduate Program Coordinator (Program Coordinator) at medical.genetics@ubc.ca
Step 2	<i>Varies</i>	Complete draft thesis; obtain approval from research supervisor(s) to send to MSc student's Supervisory Committee for review
Step 3	3 weeks	MSc student's Supervisory Committee reviews draft and returns comments
Step 4	1 week	<ul style="list-style-type: none"> Edit draft MSc thesis as advised by Supervisory Committee Obtain signatures and forward signed Master of Science Approval of Thesis for Defence form to Graduate Program Coordinator
Step 5	2 weeks	MEDG Graduate Program Coordinator schedules the defence
Step 6	3 weeks	Submit MSc thesis to Examination Committee to read prior to the defence
Step 7 – see section 3		MSc thesis defence
Step 8 – see Section 4	1 week	Submit final MSc thesis to G+PS
	10 weeks*	*From MSc thesis approved by research supervisor to defence

Step 1: Obtaining Approval to Write the MSc Thesis (Supervisory Committee Meeting)

The MEDG MSc candidate must schedule a meeting with their Supervisory Committee to obtain formal approval to write up the MSc thesis. In this meeting, the MSc student provides an overview of the chapters and subchapters that will make up the thesis and ideally shows key results as draft figures. The Supervisory Committee is to discuss the proposed MSc thesis content with respect to scientific adequacy. If satisfactory, the Supervisory Committee grants approval to the MSc student to write up the MSc thesis, which must be stated on the *Supervisory Committee Meeting Form*; the MSc students sends the signed form to medical.genetics@ubc.ca.

If the proposed outline is not satisfactory, the Supervisory Committee is to indicate the changes and additions that, once completed, should lead to approval to write up the MSc thesis.

Step 2: Writing and Obtaining Supervisor(s)'s Approval of the Draft MSc Thesis

After having obtained approval from the Supervisory Committee, the MSc student completes a draft MSc thesis (see [G+PS resources](#) in section 1 and search for a recent MEDG MSc thesis on [cIRcle](#)). The MSc student's Supervisor reads the complete draft MSc thesis and recommends revisions. The MSc student makes revisions. Once the supervisor approves, the MSc student sends the draft MSc thesis to the Supervisory Committee to

provide comments.

Steps 3-4: Writing and Supervisory Committee Approval of the Draft Thesis

Members of the Supervisory Committee read the draft MSc thesis and return comments to the MSc student three weeks after receiving the draft MSc thesis (Step 3). The MSc student edits the draft thesis based on these comments. Then, the MSc student obtains approval from the Supervisory Committee on the [Master of Science Approval of Thesis for Defence](#) form (Step 4), and submits the complete, signed form to medical.genetics@ubc.ca

Step 5: Scheduling the MSc Thesis Defence

After the MSc student has submitted the [Master of Science Approval of Thesis for Defence](#) form:

- The MSc student forwards the MSc thesis title and a brief abstract (50-150 words) to the MEDG Graduate Program Coordinator (medical.genetics@ubc.ca), who will ask the MEDG Graduate Program Advisor to appoint a MSc Thesis Defence Chair.
- The MSc student's Supervisor emails the MEDG Graduate Advisor (Dr. Taubert: taubert@cmmt.ubc.ca), several suggestions for an appropriate University Examiner (can be a MEDG faculty member or a UBC non-MEDG faculty member).
- The Program Coordinator schedules the defence. Note: The Program Coordinator requires up to two weeks for scheduling a defence. If time is limited, the Supervisor should make the required arrangements. The examination must be scheduled for **three hours**. If the Supervisor schedules the defence, please advise the Program Coordinator of the defence details.
- Medical Genetics MSc defences may be scheduled in-person or via videoconferencing, as determined by the Supervisor.
- The Program Coordinator will email a confirmation of the scheduled defence to the Defence Examination Committee; and the *Master of Science Thesis Defence Examination Form* to the Chair prior to the defence.

Step 6: Submission of the MSc Thesis to the Examination Committee

The MSc student sends the MSc thesis to the Examination Committee to read prior to the defence, at least three weeks before the scheduled defence date.

3. MSc THESIS DEFENCE (Step 7)

3.1. MSc Thesis Defence Examination Committee

The MSc Thesis Defence Examination Committee consists of a minimum of three members (excluding the MSc candidate's Supervisor(s)):

- A Chair from the Department of Medical Genetics
- A University Examiner (a UBC faculty member not on the MSc student's Supervisory Committee)
- An examiner from the MSc student's Supervisory Committee

3.2. Purpose of the Examination

The purpose of the MSc defence examination is to evaluate the candidate's knowledge:

- In the areas of specialization of their research project; and
- Of general human genetics as covered by the core courses (MEDG 520, MEDG 530).

The ability to reason and to integrate knowledge of the discipline related to the MSc student's thesis project will be emphasized.

The exam is intended to assess whether the MSc student has developed:

- Strong critical thinking abilities;
- Breadth and depth knowledge of the relevant discipline;
- Academic background for the specific MSc degree research; and
- Clear ability to communicate knowledge of the discipline.

3.3. Questions to Consider in Preparing for the Examination

Introduction:

- What was known (published literature or data in the lab) at the outset of the project?
- What were the knowledge gaps at the outset of the project?
- Why is this particular question worth asking (significance)?
- Why is it logical and reasonable to ask these particular questions (rationale)?
- What were the specific objectives of the MSc thesis research project at the outset?

Methods:

- What approaches and experimental protocols were used? Why are they appropriate? Were other approaches/methods considered?

Results Chapter(s):

- What was the question being addressed?
- What approach was taken?
- What is the result (data with tables, figures (with legends)), etc.?
- How were data analyzed statistically, and why were the applied tests chosen?

Discussion:

- What is the interpretation of the data? How do the results of the MSc thesis research integrate into the published literature (introduction)?

- How do the results contribute to the knowledge in the field?
- What are the drawbacks and limitations of the approaches/results? How might they be overcome?
- What are future directions that emerge from the MSc thesis research?

3.4. MSc Thesis Defense Procedure and Format

The defence is public, and an audience is allowed in the examination room or on videoconference; the audience may ask questions.

The Chair is an active examiner. The Supervisor(s) can examine, but does not vote. The three examiners are responsible for assessing if the MSc thesis and defence merit a pass or fail, upon consultation with the Supervisor.

Role of the Chair:

At the beginning of the MSc thesis defence, the Chair is to **read** the following procedures to the Examination Committee and the MSc student, and to direct the examination as follows:

- **Ask** the MSc student to present a 15-25 minutes summary of their thesis.
- **Round One:** Call on each examiner and the Supervisor to question the MSc student for approximately 20 minutes: the examiners first, and then the Supervisor(s).
- **Round Two:** As in Round One. If required, proceed to Round Three.
- **Ask** for questions from others in the room.
- **Ask** the MSc student and the audience to leave the room/videoconference.
- **Lead a discussion** of the MSc thesis and examination:
 - Is the written MSc thesis of the standard expected for a MEDG MSc student?
 - Did the candidate present the work and respond to questions adequately?
 - What are the Supervisor's comments?
- **Request a pass/fail vote** (orally or written ballot) from each examiner. After consultation with the Supervisor, the examiners must come to an agreement on the outcome of the examination.
- **Complete** the departmental *Master of Science Thesis Defence Examination Form* and indicate "Pass" or "Fail". All Examination Committee members must sign the form.
- **Ask** the MSc student to return to the room to receive the outcome of the vote. At that time, the MSc student will be informed by the Examination Committee of any changes recommended for the final thesis.

3.5. Following a Successful Defence

The Chair immediately emails the signed *Master of Science Thesis Defence Examination Form* to the Program Coordinator (medical.genetics@ubc.ca).

4. FINAL MSC THESIS SUBMISSION TO G+PS (Step 8)

After a successful defence, the MSc student must incorporate into the MSc thesis the edits suggested by the examination committee. The Supervisor reviews and approves the implementation of these changes, unless major changes are required. Then, the MSc student is ready to submit the final thesis, as follows.

See **full instructions** on G+PS's site a [Final Submission Instructions](#). The following is a summary of these instructions:

1. Download and submit the following G+PS forms in a single email to the Program Coordinator (medical.genetics@ubc.ca). The Program Coordinator is responsible for ensuring that each form is complete and the signatures/endorsements are genuine, and will forward these forms to G+PS on behalf of the MSc student:

- [Master's Thesis Approval Form](#)
- [Thesis / Dissertation Submission Cover Sheet](#)
- [Request for Delay in Publication \(Embargo\) of Thesis/Dissertation](#).

A request to delay publication must be well-justified and made **before you submit your thesis to cIRcle**. However, do not make the request until you have defended your thesis and are preparing for final submission. See: [How to Request a Delay in Publication](#).

Ensure your forms are sent ahead of your planned submission date. Your cIRcle account cannot be activated until G+PS has received your thesis forms. The Program Coordinator will notify you when the forms have been submitted to G+PS.

2. **Set up your cIRcle account** on the [UBC Library cIRcle User Registration](#) page. Follow [cIRcle Instructions](#) carefully. Once you have created your cIRcle account, you will be sent an email message that allows you to **set your password**.
3. **IMPORTANT:** After setting your password, **send an email to graduate.thesis@ubc.ca** to request that your account be activated. After emailing G+PS to activate your cIRcle account, you will receive confirmation that your account is activated. You will now have access to submit your thesis to the "Electronic Theses and Dissertations 2008+" repository.
4. **Convert your thesis to a single non-secured PDF file.** Follow the instructions listed on the submission portal: https://wiki.ubc.ca/Library:Circle/Uploading_Electronic_Theses_and_Dissertations.
5. **Submit your Thesis to cIRcle.** G+PS staff will review the submitted thesis for correct formatting. After review, you will be emailed either a rejection or acceptance of your submission. If rejected, detailed instructions will be provided on what to change before re-submitting. Once accepted, your MSc program will be closed. Any scholarship / award / funding will be terminated immediately.
6. **Apply for Graduation!** Prior to graduation, you may request a "[Graduate Program Completion Letter](#)" from SSC that confirms that you have completed all degree requirements.