# THESIS AND DISSERTATION

HANDBOOK FOR MASTER'S AND DOCTORAL STUDENTS ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

# **General Information**

This handbook outlines the steps that graduate students, graduate program staff and graduate faculty members need to take in order to proceed to an oral examination. This handbook was developed to serve as a guide to navigate the multi-step process that is involved and to ensure a smooth final step to degree completion.

To assist you with this process, this document contains embedded links, where applicable. We hope that they will assist you when you require additional information or immediate access to forms.

The information in this handbook has been adapted from the Faculty of Graduate Studies website.

We welcome your questions, feedback and recommendations and look forward to working with you to establish best practices in this area.

# Step 1 - Verify Completion of Degree Requirements

The oral examination for a Master's thesis or Doctoral dissertation should be the last requirement for the completion of the graduate degree program. As such, graduate students should confirm with their supervisor, graduate program assistant and/or graduate program director that they have completed their other degree requirements.

# Step 2 - Thesis and Dissertation Proposal

All graduate students must prepare a thesis or dissertation proposal. This is normally in consultation with their supervisor. The proposal should contain a brief statement in non-technical language regarding the purpose of the thesis or dissertation, its relationship to existing work in the area, and the contribution which the student hopes to make in the advancement of knowledge in the field.

The proposal must include a title (which can be changed later, if necessary), the name of the supervisor and members of the supervisory committee. The recommended maximum length of the proposal is 3,500 words unless noted differently from the graduate program.

# **Approval Process**

The student's supervisory committee must approve the proposal. Following this approval, the student must submit one copy of the proposal to the Graduate Program Director. After confirming that the Faculty of Graduate Studies and internal program requirements have been met, the Graduate Program Director (GPD) or designate, is responsible for submitting the proposal to the Office of the Dean, Faculty of Graduate Studies (FGS).

All submissions must include a proposal and a TD1: Thesis/Dissertation Research Submission Form.

Below is a list of types of research and documents to submit. Links are embedded, where possible.

Type of Research	Documents to submit
No human participants and no secondary data analysis	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> </ul>
Human participants, minimal risk	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>TD2 form (signed by student, supervisor) – original + 1 copy</li> <li>Sample informed consent and other relevant documents – original +1 copy</li> <li>TCPS Tutorial Certificate</li> </ul>
Secondary Data Analysis not conducted as part of a faculty research project	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>TD2 form (signed by student, supervisor) – original + 1 copy</li> <li>Sample informed consent and other relevant documents – original +1 copy, if applicable</li> <li>TCPS Tutorial Certificate</li> </ul>

Research involving Aboriginal/Indigenous Peoples  Do NOT use TD2 form; use HPRC form.	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>HPRC Protocol Form (signed by student, supervisor)         To access the form, contact ore@yorku.ca</li> <li>Sample informed consent and other relevant documents</li> <li>Checklist for Researchers: Research involving aboriginal peoples</li> <li>TCPS Tutorial Certificate         <ul> <li>FGS will forward to Aboriginal Research Ethics Advisory Group (AREAG) &amp; HPRC for non-delegated review</li> </ul> </li> </ul>
Human Participants, data collected under faculty research grant with HPRC Approval Certificate	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>TD4 form – original + 1 copy</li> <li>HRPC Approval Certificate for Supervisor's research project</li> <li>TCPS Tutorial Certificate</li> </ul>
Animals or biohazards (must be under faculty supervision)	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>TD4 form – original + 1 copy</li> <li>Animal Care Committee (ACC) or Biosafety Committee (BCC) Approval Certificate for Supervisor's research project.</li> </ul>
Human Participants, more than minimal risk, or Research involving Clinical Trials  Do NOT use TD2 form; use HPRC form.	<ul> <li>TD1 form (signed by student, supervisor, GPD)</li> <li>Thesis or Dissertation Proposal</li> <li>HPRC Protocol Form (signed by student, supervisor)         To access the form, contact ore@yorku.ca</li> <li>Sample informed consent and other relevant documents</li> <li>TCPS Tutorial Certificate         <ul> <li>FGS will forward to HPRC for non-delegated review</li> </ul> </li> </ul>

# **Approval Timelines**

For a **master's thesis**, the supervisory committee must review the student's research proposal and recommend its approval. The approved proposal together with other required documents in the table above must be submitted to the EECS graduate program office in time for these to reach the Faculty of Graduate Studies **no less than three months** prior to the date set for the oral examination.

For a **doctoral dissertation**, the supervisory committee must review the student's research proposal and recommend its approval. The approved proposal together with other required documents in the table above must be submitted to the EECS graduate program office in time for these to reach the Faculty of Graduate Studies **no less than six months** prior to the date set for the oral examination.

### Relevant Information and Websites

FGS Thesis and Dissertation Proposals

**FGS Research Ethics** 

• Includes detailed research types, how to secure copyright permission, sample text – copyright permission request

<u>Senate Policy for the Ethics Review Process for Research Involving Human Participants</u>
<u>Tri-Council Policy Statement (TCPS)</u>
Office of Research Ethics

# Organization and Technical Requirements

Before commencing the thesis or dissertation writing stage, students should consult with their supervisor and/or graduate program director regarding the preferred writing style and format for their program.

In addition to the above, students must conform to the standard components of a thesis or dissertation as outlined on the <u>Faculty of Graduate Studies website</u>. This webpage itemizes technical requirements which includes title page format, titling guidelines, abstract guidelines, etc.

Relevant Information and Websites

FGS Organization and Technical Requirements
Sample Title Page
Sample Table of Contents
Sample List of Tables

# Step 3 - Oral Examination

To begin the process of scheduling an oral examination, the master's thesis proposal must be approved **no less than three months** prior to the date set for the oral examination and the doctoral dissertation proposal must be approved **no less than six months** prior to the date set for the oral examination.

# Master's thesis exam committee and approval process

### Master's thesis examining committee

At least three voting members, including the Chair.

- The Chair of the examining committee shall be chosen from among the voting members. The supervisor cannot serve as Chair of the examining committee.
- Two graduate faculty members chosen from the program. At least one of whom must be from the supervisory committee. If the student is co-supervised and both supervisors would like to participate in the examining committee, a third graduate faculty member must be chosen.
- One graduate faculty member at arm's length from the thesis. Normally from outside of the program.

### **Approval Timeline and Process**

The supervisory committee must have read the thesis and agreed that it is ready to proceed to oral examination. In consultation with the Graduate Program Director, the supervisory committee must complete the Recommendation for Oral Examination Form no less than 20 business days from the date set of the oral examination. This form must include the exam committee members as well as the date and location of the oral examination. If the information is not known or not listed on this form, it will not be approved by the Faculty of Graduate Studies.

No less than 15 business days before the date set for the oral examination, the Graduate Program Director must approve the form and forward the paperwork to the Faculty of Graduate Studies for final approval and copies of the master's thesis, approved by the supervisory committee, must be distributed to the examining committee.

The student must be registered active in the term in which they defend and in any subsequent terms that they are completing their revisions.

### Final Confirmation Prior to Oral Examination

A majority of the examining committee must agree that the thesis is examinable. Five business days prior to the scheduled oral examination, the graduate program director will poll the examining committee.

If the student does not receive a majority vote, the members of the examining committee who do not agree that the thesis is examinable are required to provide their reasons in writing to the student, supervisor and the Dean within five business days after the poll. In such cases, the oral examination is postponed for a period of no more than 12 months. The student also has the right to insist that the oral examination proceed as planned.

# Doctoral dissertation exam committee and approval process

### **Doctoral dissertation examining committee**

At least five voting members, including the Chair.

- The Chair of the examining committee shall be arm's length from the supervision of the dissertation. The Chair is a representative for the Dean of the Faculty of Graduate Studies.
- One external examiner, from outside of York University. Must be arm's length from the dissertation. Recommended by the graduate program director.
- One graduate faculty member at arm's length from the dissertation. Normally from outside the program. Recommended by the graduate program director.
- Two graduate faculty members from the supervisory committee or one member from the supervisory committee and one graduate faculty member from the program. If the student is co-supervised and both supervisors would like to participate in the examining committee, a third graduate faculty member must be chosen.

Under rare, exceptional circumstances can an oral examination proceed in the absence of the external examiner and only with the prior permission of the Dean of Graduate Studies.

### **Approval Timeline and Process**

The supervisory committee must have read the dissertation and agreed that it is ready to proceed to oral examination. In consultation with the Graduate Program Director, the supervisory committee must complete the <u>Recommendation for Oral Examination Form</u> no less than 25 business days from the date set of the oral examination. This form must include the exam committee members as well as the date and location of the oral examination. If the information is not known or not listed on this form, it will not be approved by the Faculty of Graduate Studies.

External examiners are expected to be established academics, normally a graduate faculty member at another university. It is imperative that the student not have any contact with the external examiner. It is the responsibility of the Graduate Program Assistant or Graduate Program Director to distribute the dissertation to the external examiner. Upon approval of the external examiner, a formal letter will be written by the Faculty of Graduate Studies to the external examiner.

For external examiners' expenses above \$350, graduate programs must obtain approval. It is important to not invite external examiners unless approval has been obtained.

No less than 20 business days before the date set for the oral examination, the Graduate Program Director must approve the form and forward the paperwork to the Faculty of Graduate Studies for final approval and copies of the doctoral dissertation, approved by the supervisory committee, must be distributed to the examining committee.

The student must be registered active in the term in which they defend and in any subsequent terms that they are completing their revisions.

### Final Confirmation Prior to Oral Examination

A majority of the examining committee must agree that the dissertation is examinable. Five business days prior to the scheduled oral examination, the graduate program director will poll the examining committee.

In addition to the above, for the doctoral dissertation, the external examiner will be asked to submit written comments five business days in advance of the oral examination. These comments will be made available to the student after the oral examination, with the external examiner's permission.

If the student does not receive a majority vote, the members of the examining committee who do not agree that the dissertation is examinable are required to provide their reasons in writing to the student, supervisor and the Dean within five business days after the poll. In such cases, the oral examination is postponed for a period of no more than 12 months. The student also has the right to insist that the oral examination proceed as planned.

# Delay in Publication/Restricted Access

Normally, there are no restriction on the publication of and access to theses and dissertations. In exceptional circumstances, students may request to restrict access to their thesis or dissertation for a maximum of 3 years. Please note that a 12-month request is considered to be the norm.

Valid reasons for delaying the publication include but are not limited to:

- A contract between the research sponsor and the University specifying a period of confidentiality. A proof of contract is required.
- Funding was provided by a sponsor who has required a delay in publication.
- Applying for a patent. A proof of application is required.
- Publication obligation in a contract.

To request a delay in publication, complete the <u>Request to Delay Publication form</u>. You will need to provide a rationale for the embargo request and submit supporting documentation from your supervisor, as well as any additional supporting documents.

### Public Attendance at Oral Exams

The oral examination is a public academic event. Graduate students, faculty members and other persons may attend the oral examination. At the discretion of the Chair, the audience may participate in the questioning. Only members of the exam committee may be present for the evaluation and for the vote at the conclusion of the oral examination.

### **Oral Examination Outcomes**

The examining committee determines the results of the oral examination. They report the results to the Office of the Dean, Faculty of Graduate Studies by using the <u>Oral Examination Report Form</u>. The form is signed by the Chair and should include details regarding any revisions under the comments section.

There are four outcomes that can result from the oral examination.

- Accepted with No Revision
- Accepted Pending Specified Revisions
  - For Master's thesis If there is one vote for major revision, it is expected that the outcome would be Accepted Pending Specified Revisions.

- For doctoral dissertation if there are no more than two votes for major revision or one vote for failure, it is expected that the outcome would be Accepted Pending Specified Revisions.
- These revisions can range from minor edits, typographical errors, specified insertions or deletions which would not fundamentally modify the development or argument of the thesis.
- The supervisor is responsible to confirm that all suggested changes are made. The Chair and/or Dean's representative will confirm this.
- Revisions must be completed within six months of the oral examination. Students must be registered active during this revision period and if the revisions extend to another term, the student is responsible to remain registered and pay tuition fees.

### Accepted Pending Major Revisions

- The examining committee can determine that the thesis or dissertation falls under this
  category if the committee decides that substantive changes are required for the thesis
  or dissertation to be considered acceptable or there is a minimum of two votes for
  major revision or there is one vote for failure.
- In cases of major revision, there are two procedures that need to be followed prior to finalizing the oral examination results.
  - The committee will reconvene within twelve months to continue the oral examination or
  - The revised thesis will be circulated within twelve months to all members who will inform the Chair if they feel the requirements have now been met.
- The Chair must provide detailed reasons for referring pending major revisions to the Dean of Graduate Studies, Faculty of Graduate Studies, graduate program director and the student within 10 business days.
- Approval of major revisions must be reported to the Office of the Dean, Faculty of Graduate Studies by using the <u>Revisions Approved Memorandum</u>. This form can be sent to the Thesis and Dissertation Coordinator.

### Failed

 Detailed reasons must be provided in writing by the Chair to the Dean of Graduate Studies, Faculty of Graduate Studies, graduate program director and student within 10 business days.

### Relevant Information and Websites

### **Oral Examinations**

- Exam Committee including committee member roles and responsibilities
- External Examiners (Doctoral dissertation)
- Approval Process
- Evaluation Guidelines
- Reporting of Results

Recommendation for Oral Examination Form

**Oral Examination Report Form** 

Revisions Approved Memorandum

Thesis and Dissertation Coordinator Email Address – gsthesis@yorku.ca

# Step 4 - Submission to Electronic Thesis Dissertation (ETD) platform

After the oral defense and completed revisions, if applicable, there is still another stage to fulfill in order to complete program requirements. Students must submit their thesis or dissertation electronically via the Electronic Thesis and Dissertation (ETD) platform.

A Thesis and Dissertation Coordinator will open an ETD record once the following documents have been received.

- Oral Examination Report (passed)
- Revisions Approved Memorandum, if applicable
- Library and Archives Canada Theses Non-Exclusive License Form, signed and dated
- Copies of copyright permissions, if applicable

Once an ETD record is opened, the student will receive an email with instructions on how to log in and how to complete their submission. The student provided their email address on the Recommendation for Oral Examination form.

To ensure a smooth upload, a few suggestions are noted below.

- Ensure that the thesis or dissertation follows the <u>organization and technical requirements</u> as outlined on the Faculty of Graduate Studies website.
- Ensure that your <u>title page</u> conforms to the FGS template.
- It is important for students to use this same email address as the Recommendation for Oral Examination form when they log in to the ETD.
- Review the <u>instructions</u> on the ETD platform.

The final step in submitting your thesis or dissertation is to agree to York University's copyright license. By clicking "I Accept and Send for Review" you are confirming that your thesis or dissertation does not infringe on any rights of others and that you have the right to make the grant conferred by this copyright license. For more information, review the <u>Submitting for Review</u> section.

At any time, you can check the status of your submission by logging into the ETD. Click on the "Check Status" tab in the navigation tab.

Relevant Information and Websites

Organization and Technical Requirements Instructions on how to submit on the ETD YorkSpace Institutional Repository

# After you submit on the ETD

Once you accept and "send for review", your ETD will change from "Open" to "Under Review". Once submitted you will not be able to make changes. A Thesis or Dissertation Coordinator will review your submission and you will receive a confirmation email informing you of this.

If you have made an error or have forgotten to include something, you can email the <u>Thesis and Dissertation Coordinator</u> to request that your record be re-opened. Please remember to include your student number in all correspondence.

After your submission has been reviewed, you will receive an email notifying you of one of two outcomes.

- Your submission has been approved and will be deposited to YorkSpace upon conferral of your degree or
- Your submission has formatting or other errors and has been returned to you for modification.

If your submission has been returned to you, your ETD record will be reopened to allow you to make the required changes and resubmit. The required changes to your PDF thesis or dissertation document will be outlined in an email to you. When your changes have been completed, replace the previously uploaded file with the updated one. You must click on "I Accept and Send to Review" on the "Submit to Review" tab to resubmit your thesis or dissertation. The process for reviewing the submission will begin again.

# YorkSpace

<u>YorkSpace</u> is York University's Open Access Institutional Repository (IR). Your thesis or dissertation will be deposited here after your degree is conferred. Please note that you retain copyright of your thesis or dissertation and may make it available on a personal website and pursue other sources of publication.



# Master's Thesis Defense Roadmap

Research
proposal must be
approved by
supervisory
committee.
Submit to FGS for
approval.

Provide
examining
committee with
copies of
dissertation.

After exam, results are reported to FGS.
Committee completes the Oral Exam

Before FGS can set up an ETD record for you, they must have 1) oral exam report 2) revisions approved memo (if applicable), 3)

<u>Library and Archives Non-exclusive license form</u> 4) copies of copyright permissions (if applicable).

3 months before defense No less than 20 business days before defense

After recommendation for oral paperwork has been approved

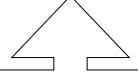
5 business days before oral exam

<u>Day of</u> Oral Exam

Revisions

Upload to ETD

Confirmation of completion



Supervisory committee must read the thesis and agree that the version read is ready to proceed to defense. Complete paperwork to recommend for oral exam.

### **Examining Committee:**

Chair\*

Two graduate faculty members from the program, one must be from the supervisory committee.

One graduate faculty member at arm's length, and normally outside of the program.

\*Must be arm's length from the dissertation.

Most of the members must agree that the thesis is examinable.

Complete revisions

as soon as possible.

Supervisor to
complete Revisions
Approved
Memorandum
Form.

If revisions spill over to next term, additional tuition fees may apply. You may

You may Check your status on ETD to confirm your submission has been accepted.

If a delay in publication is necessary, <u>complete the</u> form with documentation.



# **Doctoral Dissertation Defense Roadmap**

Research proposal

must be approved by supervisory committee. Submit to FGS for approval. Provide examining committee with copies of dissertation.
Student cannot contact External Examiner for any reason

After exam, results are reported to FGS.

Committee
complete the Oral
Exam Report
Form.

Before FGS can set up an <u>ETD</u> record for you, they must have 1) oral exam report 2) revisions approved memo (if applicable), 3) <u>Library and Archives Non-</u>

exclusive license form 4) copies of copyright permissions (if applicable).

6 months before defense

No less than 25 business days before defense

After recommendation for oral paperwork has been approved

5 business days before oral exam <u>Day of</u> Oral Exam

Revisions

Upload to ETD

Confirmation of completion

Supervisory committee must read the dissertation and agree that the version read is ready to proceed to defense. Complete paperwork to recommend for oral exam.

**Examining Committee:** 

Chair\*

External Examiner, outside York\*
Graduate faculty member\*
Graduate faculty member from supervisory committee x2
\*Must be arm's length from the dissertation.

External Examiner report is due to FGS. GPD polls examining committee. Most of the members must agree that the dissertation is examinable.

Complete revisions as soon as possible.
Supervisor to complete Revisions
Approved
Memorandum Form.

If revisions spill over to next term, additional tuition fees may apply. You may
Check your
status on
ETD to
confirm your
submission
has been
accepted.

If a delay in publication is necessary, complete the form with documentation.