

# Department of Electrical and Computer Engineering

## PhD Final Oral Examination Checklist

Dear Student,

To prepare for your oral exam, please read the following:

### Final Ph.D. Oral Exam:

The final PhD oral exam must be conducted in two stages: (a) an initial internal departmental exam involves only the supervisory committee and (b) a final oral defense involves the full examining committee as required by FGSR. Student and thesis supervisors please note that it will take a minimum of 8 weeks for these two stages to be completed.

#### **A. Internal Departmental Final Exam**

The purpose of this process is to ensure the thesis is examined by the supervisor and all supervisory committee members and to verify that it is of sufficient substance and quality to proceed to the defense. This process is critical to protect and uphold the reputation of the department and the University of Alberta for excellence in graduate programs. It is also critical to ensure that External Examiners and other additional members of the examining committee are not asked to invest time reading a thesis that is substandard.

(1) 2 weeks prior to the internal department exam the student must provide all members of the supervisory committee with a copy of the PhD thesis. The ECE Internal Examination form (indicating the date, time and exam committee members) should be completed and returned to Pinder Bains two weeks prior to the exam.

(2) As part of the internal departmental exam, the student must give a 30-35 minute public seminar on the thesis research to the Department, and after the seminar, the PhD supervisory committee will meet with the student to examine the student's readiness for the final oral exam.

To help us advertise your seminar, please send an e-mail containing the information detailed below to the Graduate Student Advisor, Pinder Bains [pinder.bains@ualberta.ca](mailto:pinder.bains@ualberta.ca) and Selina Ertman [ertman@ualberta.ca](mailto:ertman@ualberta.ca)

- Subject: Seminar.
- Student name: Your name.
- Purpose of the seminar: PhD Final Examination.
- Date and time of the seminar (same as internal departmental exam).
- Remote Invite
- Area of interest (communications, software, power, control, photonics, plasmas, etc.)
- Your supervisor(s) name.
- Title of your seminar (same as your thesis).
- Abstract. Include abstract in the body of your e-mail message and not as an attachment.
  
- Prepare a brief biography (100 words maximum) that your supervisor will use to introduce you to the audience.

You or your supervisor should send a reminder e-mail regarding your exam to your exam committee members the day before the exam.

You should bring a hard copy of your thesis to the exam with you.

The possible outcomes of the internal departmental exam:

(i) If the PhD supervisory committee agrees that both the student and the thesis are ready to proceed to the final oral exam, the student can proceed to the final PhD oral exam (see part B below). The supervisory committee will sign the thesis sign-off sheet and return the sheet to the Graduate Student Advisor.

(ii) The PhD supervisory committee may decide the student can proceed to the final PhD oral exam after some conditions are met. In this case, the supervisory committee shall discuss with the student the details of the conditions and the time frame for the student to meet the conditions. When all conditions have been met, the supervisory committee then will sign the thesis sign-off sheet and return the sheet to the Graduate Student Advisor.

(iii) The PhD supervisory committee may decide the conditions to be met cannot be done within the duration for completing a PhD program. In this case, the supervisory committee shall discuss with the student and may recommend the student to transfer to a Master program (if circumstances allow).

## B. PhD Final Oral Defense

If you pass the internal departmental final exam, then:

(1) The supervisor can nominate an external examiner to the Department by submitting a completed "Approve *External Examiner for Final Doctoral Oral Examination*" form accompanied by a CV of the proposed external examiner. The form is available on the GPS web site <https://www.ualberta.ca/graduate-studies/about/resources-for-faculty-and-staff/forms-cabinet>

(2) After the approval of the external examiner, the supervisor of the student should contact the Graduate Student Advisor with details of the final PhD oral exam at least 5 weeks before the exam date (the period between Christmas and New Year's does not count). A *Notice and Approval of Oral Examination Committee* must be approved by the Department. At this time, you must provide a copy of the PhD thesis, abstract and a copy of the Summary of Student Record to the Department (so that the Department can send them to the external examiner) and the student also must make sure the rest of the examining committee has a copy of the thesis.

You must write a *Summary of Student's Record*. This should include courses completed, grades, awards, publications, conferences, etc (anything that pertains to your PhD program). You will need to send an electronic copy of your Summary of Student Record and thesis to Pinder Bains to send to the external examiner at least 5 weeks before the exam (excluding the period December 25 – January 1). You will need to send copies of your thesis to everyone else on your examination committee at least three weeks before the exam. The information that you provide in your Summary of Student Record will be made available to the members of the examining committee during the exam. **Note:** a curriculum vitae is not a substitute for this form.

You should bring a hard copy of your thesis to the exam with you.

At the PhD exam, after proper introductions, the chair of the examination reviews the procedures to be followed. Then the candidate is asked to briefly leave the room while his/her academic file and background are reviewed. The candidate is then asked to return to the room and give a 20 to 25 minute oral presentation on his/her thesis work. Upon completion of the oral presentation, the candidate is asked questions by the examining committee. There are normally two rounds of questions from the examiners. In each round, questioning is begun by the external examiner if presents, followed by the out-of-department examiner (internal/external) and proceeds to the supervisor. After questioning has concluded the candidate can make a final statement if he or she so desires and then is asked to leave the room again for the examination committee to reach its final verdict. The verdict shall be one of the following:

Pass. No revisions are required.

Pass with revisions. This means that the student has satisfactorily defended the thesis but the thesis document requires changes that are minor in substance or of an editorial nature. If revisions will take more than 5 working days after the exam, the Chair is required to complete a "Final Exam Outcome" form.

Adjourned. An oral examination should be adjourned if (a) the revisions are more substantial than editorial or minor reworking. (b) if the committee is dissatisfied with the candidate's oral presentation and defense of the thesis, or (c) in case of extraordinary circumstances such as sudden medical emergency during the exam.

Fail.

GPS requires the following 2 forms before they will allow you to submit your thesis.

1. Program Completion Form – pick up from Graduate Student Advisor
2. University of Alberta Thesis/Dissertation/Non-Exclusive <https://www.ualberta.ca/graduate-studies/media-library/forms-cabinet/records/degree-certificate-completion/20191210-ua-thesis-dissertation-non-exclusive-license.pdf>

If applicable, you may also need to provide the following (check with your supervisor):

1. Copyright Permission Letter <https://uofa.ualberta.ca/graduate-studies/about/resources-for-faculty-and-staff/forms-cabinet>
2. Restricting Access to a Thesis <https://uofa.ualberta.ca/graduate-studies/about/resources-for-faculty-and-staff/forms-cabinet>

After you have submitted your thesis electronically to GPS, they will send you an e-mail to confirm acceptance of your thesis. You should then:

You will need to apply for convocation through Beartracks

If you require a program completion letter, you can send an e-mail to [grad.mail@ualberta.ca](mailto:grad.mail@ualberta.ca) to request the letter.

Your convocation information will be sent to you by e-mail. Information is also available on the Office of the Registrar's web site <http://www.registrarsoffice.ualberta.ca/GraduationConvocation/Convocation-Contact-Information.aspx>

You will need to contact ECE Reception to return your keys and clear your desk.

The Department of Electrical and Computer Engineering would like you to complete this exit survey <https://forms.gle/wkGBTa1V5byV1Z6X6>

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