Computational Media Design (CMD) Graduate Program
Doctoral Candidacy Requirements

The University of Calgary Doctoral Candidacy Regulations ("the Regulations") govern the conduct of admission to candidacy at the University of Calgary. This document establishes program specific requirements associated with the conduct of admission to graduate candidacy under the Regulations.

A. Statement of Purpose

Admission into candidacy in the Computational Media Design (CMD) Graduate Program signifies that the student is prepared and competent to undertake PhD level research in a field in Computational Media Design.

The candidacy components ensure that students have a viable research topic, the background in both Computer Science and another CMD discipline to accomplish the research, a plausible plan and timeline for the research to be completed successfully, and the skills in both writing and verbal communication to articulate their work.

Candidacy is an important process that is intended to reveal strengths and weaknesses in the student's background and proposed research, and provide a formal opportunity for feedback relatively early in the student's program.

B. Candidacy Components

All doctoral students in the Computational Media Design Graduate Program must successfully complete the following three components:

1. Course requirements
2. Field of study written examination
3. Oral examination of (written) thesis proposal

For clarity, students would normally prepare/complete items in this order: course requirements; thesis proposal; field of study written examination; oral examination of thesis proposal (see timeline).

COURSE REQUIREMENTS

Course requirements as stated in the Computational Media Design entry in the Faculty of Graduate studies calendar have to be completed at least two weeks before the Oral Examination of the Thesis Proposal. Coursework is typically completed in the first year of the program, but may vary based on course availability and recommendations by the student's supervisors.

THESIS PROPOSAL

A thesis proposal is essential in defining the student's research and situating it within the field of study. The thesis proposal is examined in the oral examination.

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The thesis proposal will contain, at minimum: an abstract, a literature survey, an overview of the proposed research and creative work, a plan or timeline for completing the proposed research and creative work, and references. The student, in consultation with the student’s supervisory committee, prepares the proposal. The length of the thesis proposal is to be determined in consultation with the supervisor and co-supervisor, but should not exceed 10,000 words, excluding references and any appendices.

The supervisor must submit the final version of the thesis proposal to the Graduate Program Administrator at least eight weeks before the oral examination of the thesis proposal. Students are expected to submit their thesis proposal no later than 26 months into their PhD.

FIELD OF STUDY (FoS) WRITTEN EXAMINATION

1. Scheduling of FoS Examination
The FoS written examination is taken by the student after their course work is completed, and the submission of the thesis proposal to the Graduate Program Administrator. The FoS written examination must be completed at least five weeks before the oral examination of the thesis proposal.

2. Composition of FoS Examination Committee
The FoS written examination is evaluated by the entire supervisory committee.

3. Format of FoS Examination
The FoS written examination consists of a take home examination and is written over a two-week period. The written exam may consist of one or more questions, which are selected based on topics from the thesis proposal. Note, however, that the FoS written examination is not an evaluation of the thesis proposal; the thesis proposal is examined in the oral examination. The written exam question/s is/are set by the student’s supervisor and co-supervisor in consultation with the student’s supervisory committee and is/are submitted to the Graduate Program Director for approval. The Graduate Program Director will assess the question/s, in conjunction with the thesis proposal, to ensure they reflect the knowledge base the student needs to succeed in their chosen field, and that they seem manageable for the student to complete in the allotted time. Regardless of the number of questions assigned, the total length and format of the answer/s to the examination is the equivalent of a typical research paper (at most 5000 words, excluding references and any appendices).

Once the question/s for the FoS written examination is/are approved by the Graduate Program Director, the Field of Study written exam is scheduled. The Graduate Program Administrator then gives the exam questions to the student at the day and time of the exam and confirms receipt of the answers by the
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date and time specified in the exam. The Graduate Program Administrator will inform the student how their answers are to be submitted (e.g., email, hard copy).

Within one week of receiving the student’s completed written examination, members of the student’s supervisory committee will evaluate the written exam, judging whether it is of sufficient quality for the student to pass on to the oral examination of the thesis proposal, and undertake a PhD. A written examination is of sufficient quality if it, overall, demonstrates the student’s knowledge of and currency in their field of study, their ability to craft written arguments, and the student’s academic writing ability, as well as being formatted in accordance to the formatting guidelines outlined under section 3. Format of FoS examination.

In the evaluation of the FoS examination, should the outcome of the final vote include not more than one negative vote, the student will pass; should the outcome include two or more negative votes, the committee’s recommendation to the Graduate Program Director will be fail.

If a written examination, overall, is determined by an examiner to be a “fail”, they will provide a brief account of that examination’s shortcomings and suggest what remedial actions are needed. Each examiner will submit to the Graduate Program Director their written assessment of the examination (i.e., “pass” or “fail” plus remedial actions recommended) within one week of receiving the completed FoS written examinations. The Graduate Program Director will inform the student and supervisory committee members of the results for the written examination within one business day of receiving all of the committee members’ assessments.

**Note:** In instance of a potential of a conflict of interest, such as when the GPD is a member of the examining committee, one of the program co-directors or a designate will substitute for the GPD.

**ORAL EXAMINATION OF THE THESIS PROPOSAL**

**1. Scheduling of Oral Examination**
Once the student has successfully passed the FoS written examination, a Notice of Oral Examination form will be completed by the Graduate Program Administrator, and kept on the student’s file for record-keeping purposes. The Oral Examination will be scheduled for approximately four weeks after the student has successfully passed the FoS written examination. The Oral Examination is a closed exam.

**2. Composition of Oral Examination Committee**
The examination committee consists of the supervisory committee, plus one examiner from the CMD faculty membership (that is: from the set of faculty members actively engaged in the CMD program), and one examiner from outside the CMD membership and the supervisor’s/co-supervisor’s academic units (e.g., outside the Department of Computer Science within the Faculty of Science). A Neutral Chair will also be present at the oral examination.
3. Process of Oral Examination

Length of Examination
The examination should not exceed two hours. This does not include the deliberation time of the Committee.

Examiners’ Questioning
Following the student’s presentation, which is to be no longer than 20 minutes in length, the examination committee will move onto the question period. Only members of the examination committee are allowed to question the student. All examiners should be given an opportunity to question the student during the examination, e.g., by rounds of questioning. Questions to the student should be clear and succinct. Examiners’ questions are to focus on the thesis proposal. The student should be given reasonable time to answer. If the student has understood the question and cannot answer, the examiner should pass to another question and not attempt to extract an answer by prolonged interrogation, or by leading the student. The Chair should guard against any tendency of examiners to interact with each other instead of concentrating on the examination of the student. The Neutral Chair must stop the exam if one of the examiners needs to leave the room and will reconvene the exam when all examiners are present.

Official Examiners’ Discussion
At the end of the examination, the student is asked to withdraw from the room. Before any discussion of the student’s performance, each examiner must give their preliminary recommendation of Pass or Fail by secret ballot collected by the neutral chair for the oral exam. This provides the committee with a frame of opinion on which to base a discussion of the student’s performance.

4. Evaluation of Oral Examination

Passing the Oral examination
The Oral examination will be evaluated using the following criteria: demonstrated knowledge about the research proposed and the ability to defend the line of research proposed. Every effort should be made to reach a unanimous recommendation. Should the outcome of the final vote include not more than one negative vote, the student will pass. The Neutral Chair will submit the final recommendation of pass to the Graduate Program Director within one working day of the completion of the examination.

Failing the Oral examination
Should the outcome include two or more negative votes, the committee’s recommendation to the Graduate Program Director will be fail. In the case of a fail,

- The Neutral Chair must inform the student of the committee’s recommendation immediately following the vote of the examination committee. The Neutral Chair will submit the final recommendation of fail to the Graduate Program Director within one working day of the completion of the examination.
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- The examiners write brief memos to the Graduate Program Director explaining the reasons for their vote within five working days from the date of the examination.

- The Graduate Program Director may uphold the fail in the case of a clear fail or refer to FGS for decision in the case of an unclear fail. If the GPD upholds the fail, after consultation with the supervisor and co-supervisor, the Graduate Program Director then summarizes the essential points from the memos to the student, copied to the supervisor, co-supervisor and FGS (gpoform@ucalgary.ca).

- The Graduate Program must send the Notice of a Failed Candidacy Component to the student within ten working days from the date of the examination. The Notice and the post exam memos must be kept on the student’s file. If there is an appeal, the Notice and supporting documents must be submitted to FGS (gpoform@ucalgary.ca).

Note: In instance of a potential of a conflict of interest, such as when the GPD is a member of the examining committee, one of the program co-directors or a designate will substitute for the GPD.

C. Failed Components

A student who fails the field of study written examination or the oral examination of the thesis proposal will be allowed to retake the examination within six months of the failed examination. The second failure of a candidacy component will result in a student being required to withdraw. In the case of failed outcomes, students have the right to appeal. Students must appeal directly to the Faculty of Graduate Studies (see the Graduate Calendar’s Academic Regulations, under Appeals Against Faculty of Graduate Studies Rulings).
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Timeline – Number of Weeks Prior to Candidacy Examination
(minimum time required)

12 weeks prior to candidacy examination
Course requirements completed

8 weeks prior to candidacy examination
Supervisor submits student’s thesis proposal to GPA

7 weeks prior to candidacy examination
FoS written examination assigned, student has 2 weeks to complete

Oral examination of thesis proposal
No later than 28 months after entering PhD program

*This is only a guide. Specifics on the process are above.