

OCICS PhD Activity CSI9998 Comprehensive Exam

Background

The comprehensive exam is to establish if a PhD student has the **depth and breadth** of knowledge that the candidate is likely to complete the PhD successfully in a timely manner. The breadth consideration is important as the area requirements for courses has been removed. It is therefore expected that at least one of the minor topics is further removed from the intended research direction of the PhD student.

Calendar Description

“A committee must be assembled and must approve at least 3 topics for written examination: typically, a major and two minor areas. An oral examination occurs if the written exam is passed. Both elements must take place within the first 4 terms following initial registration in the program. The comprehensive examination may be failed, passed conditionally (i.e., with extra course requirements) or passed unconditionally. If failed, this course may be retaken at most one time. This course is equivalent to COMP 6907 at Carleton University.”

The graduate office sends an email to newly admitted PhD students informing them of the deadline to complete the comprehensive exam.

Requirements

The academic office imposes strict time limits on the comprehensive exam. It needs to take place within the first four terms of the PhD program (at the time of writing this document, see the above calendar description).

An exam committee needs to be formed with a total of three members where the supervisor may be one of them. The committee needs to include a member of the joint institute (OCICS) from Carleton.

The topics for the PhD exam need to be organized in one major and two minor topics. There should be a 3 hrs written exam for the major on one day and on the following day, two 2 hrs exams for the two minors. Slight modifications are fine but the exams need to take place close together. The supervisor also needs to check with the student if any accommodations are appropriate in consultation with SASS.

The written and oral exam need to be about one week apart, to give the student enough time to prepare for the oral.

Procedure

The PhD supervisor is responsible for managing the process and the exam. The steps are as follows:

- The PhD supervisor will reach out to colleagues and assembles a committee. The supervisor collects a reading list from each committee member along with requirements for the exam (e.g., open/closed book, use of calculators etc.). The supervisor collates this information into a single document and asks the PhD student to submit this

document as a service request.

- Once the PhD student receives the reading list, the reading list along with the form for the exam committee needs to be submitted by the PhD student.
The service request to submit: Research related/ Comprehensive exam
Documents to attach:
 - Form: Nomination of committee members
See the attached [comprehensive examiner nomination en.pdf](#)
 - Reading list (no specific form)
- The service request for the exam committee and reading list are verified by the CSI graduate coordinator and approved.
- The supervisor schedules the written and oral examination. The supervisors will be responsible to reserve a room for the written exam and if desired for the oral exam. (The oral exam is typically taking place through Zoom or MS Teams). The supervisor is responsible to invigilate the written exams. The corner rooms STE-5000 may be an option. The CSI academic administrator will need to be informed by email to Engineering Graduate Reception gprecept@uottawa.ca.
- The written exams will be collected by the supervisor and distributed to the committee for marking. If the original answers are on paper, the supervisor retains the exam answers (same as any other exam).
- The supervisor will chair the oral exam. The oral exam must give enough time for each committee member to confirm the written answers and ask clarifying question, hence the typical duration for an oral exam is 2-3 hrs. The exam is marked as satisfactory/unsatisfactory. The exam may be deemed satisfactory if additional conditions are satisfied. Common conditions are the completion of an additional course to fill gaps in background, completion of an implementation project or a written report on background material.
- The supervisor will fill the form, sign it and submit it to Engineering Graduate Reception gprecept@uottawa.ca cc to all committee members and the student.
 - Form: Report on Comprehensive Examination:
See the attached [report on comprehensive examination.pdfs](#)

Some special circumstances and possible solutions:

The additional conditions may require the supervisor to meet with one or both other committee members to meet with the PhD student. The supervisor is responsible to inform the graduate administrator when a condition is satisfied by sending an email to Engineering Graduate Reception gprecept@uottawa.ca

If a committee member in consultation with the supervisor sees the need for a different length of exam more suitable for the topic/circumstances, then it should be indicated on the reading list. The CSI graduate coordinator should be notified.

Sometimes despite the efforts of the supervisor, no suitable Carleton OCICS member of the exam committee can be found. In this case the CSI graduate coordinator should be contacted.