Ph.D. Computer Science Comprehensive Exam Procedures

The comprehensive examination tests the student's mastery in the specialization and closely related areas, and, when applicable, the specific topic of the intended dissertation. The comprehensive examination consists of two components: an oral component and written component. The Comprehensive Exam takes place prior to defending the dissertation prospectus. The Comprehensive Exam takes approximately six weeks. Students should plan in advance and must ensure that they are registered at all times in at least one credit graduate level course (e.g. 580, 792, 795, or 799). This includes if either part of the written or oral portion of the comprehensive exam will be held in summer.

Important! Check List prior to starting the Comp Exam:

1. Interactive Plan of Study (iPOS) must be approved.
2. All committee members must be listed in the iPOS.
   a. Please fill out the Graduate Supervisory Committee Appointment or Change Form for approval of your committee. The form is on the CIDSE Graduate Forms webpage. You will also need to submit the request electronically through the iPOS tab on your MYASU.
   b. To get an external member (who is not a faculty at ASU) approved to serve as a member on your committee; you must submit an Individual Committee Approval form located on the CIDSE Graduate Forms webpage. The form needs to be completed by the student and submitted at the Advising Center BYENG 208 together with the CV of the external member.
   c. If the external faculty member will be acting as a co-chair (this includes an on- or off-campus individual), you must first submit an Individual Committee Approval form located on the CIDSE Graduate Forms webpage together with the CV of the faculty to the Advising Center (BYENG 225).
3. Students must be in good academic standing regarding GPA requirements prior to taking doctoral comprehensive examination

Comprehensive Exam

The Written Portion

Step 1: Student submits an electronic copy of the Comprehensive Exam Syllabus that is approved by the PhD committee (see a template in Appendix) to one of the graduate advisors. In the subject heading, the student mentions Comprehensive Exam and First and Last Name. In the message, the student mentions the all committee member
names and provides e-mails of the committee members especially for external members.

**Step 2:** The Graduate Advisor e-mails to the committee together with the Exam Syllabus and gives them a two-week deadline to send their questions to the advisor.

**Step 3:** The Graduate Advisor gathers all the questions from all committee members and sends it in one e-mail to the student with a 10 working days deadline.

**Step 4:** The student sends the Q & A back to the committee and copies the graduate advisor. The outline of the written paper should include the faculty name, the questions given by the faculty, and immediately following the answer for each of the question.

**The Oral Portion**

**Step 1:** Normally, the oral exam is scheduled after two weeks from the date the student submits the Q & A to the committee. However, if this is not possible to schedule within two weeks, it should be scheduled at the earliest convenience of the committee availability. It is the student’s responsibility to schedule the oral exam by contacting the committee and arranging for room reservation.

**Step 2:** The student contacts Monica Dugan, 5th Floor Brickyard, to reserve a room and provides with the date and time. The student should plan to have the room reserved for at least 2-3 hours.

**Step 3:** The student downloads the [Doctoral Comprehensive Exam Form](#) and hands it to the Dissertation Chair on the day of the oral exam. This form is located on the CIDSE Graduate Forms webpage.

**Step 4:** After the exam, the student drops of the [Doctoral Comprehensive Exam Form](#) at the Advising Center (BYENG 225) for processing. Please keep a copy for yourself!

The Dissertation Prospectus can take place no earlier than the semester following the completion of the comprehensive exam. Please see the [Dissertation Prospectus Procedures](#) for more information.
Absent Committee member procedure:

While it is desirable that all members of a student's supervisory committee be available during the oral exam portion, there are situations (e.g. faculty travel, faculty emergencies and/or faculty leave) that may necessitate holding the written and/or oral exam with one or more committee member(s) absent. The Academic Unit has established the following policies and procedures for such cases.

1. A minimum of 4 committee members (including chair/co-chair) from the student's official committee must be available during the student’s written and oral exam.

2. The chair (or one co-chair) must be available for both the oral and written portion of the exam. If this is not possible, the exam must be rescheduled.

3. A committee co-chair or member who cannot be available during the oral exam, may participate in one of three ways. These options are listed in the order of preference:
   
   a. The absent committee member videoconferences into the oral exam defense location.*
   
   b. The absent committee member teleconferences into the oral exam defense location.*
   
   c. The absent committee member provides a substitute to be physically present (approved by the committee chair & the head of the academic unit) for the oral exam defense only. The substitute must be someone who is approved to serve on graduate supervisory committees for that program. The absent committee member should provide the substitute questions, in writing, to be asked at the defense. The substitute, although respecting the opinions expressed by the regular committee, must be free to use his/her judgment in voting on whether the student passes or fails the defense. The substitute should sign the absent committee member's name, and add his/her initials directly after the signature.

*Students must provide a copy of their document and any other supporting presentation materials to the committee member at least 5 working days in advance of the defense. The defense location must have the necessary equipment to accommodate video/teleconference materials.

If the videoconference or teleconference option is selected, the absent member needs to e-mail the committee chair or co-chair to state that member voted to pass or fail the student and authorize that the chair sign their name on the form. The committee chair or co-chair should sign the name of the absent individual on the form and then add his/her initials directly after the signature.

If a committee member will be absent from the oral defense, the student or committee chair/co-chair must notify the Program Chair before or at the time of scheduling the oral exam defense. If the student is notified of an absence after scheduling the oral exam, the student must contact the Program Chair prior to the oral exam defense date, so he/she finds a substitute.
Appendix – Comprehensive Exam Syllabus Example

Comprehensive Exam syllabus for Name

General area of research Name’s area is at the intersection of Software Engineering, Programming Language Semantics and Static Analysis.

Specific Area of Research Name is working on software updates, namely dynamic software updates.

COMPREHENSIVE EXAM SYLLABUS Name

I. Programming Languages Semantics

II. Static Analysis

III. Software Updates


