College of Information Science - PhD in Information, Comprehensive Exam Guidelines

The Comprehensive Exam is the College of InfoSci's Comprehensive Examination for Advancement to Candidacy. Students advance to candidacy once they pass the exam and have completed all coursework within their program of study. The examination, therefore, should not take place until the student has completed all, or almost all, of their coursework.The exam must be completed within one semester of finishing coursework; thus, students who complete coursework in May must sit for their qualifying exams by the following January, and students who finish coursework in December must take the exams by the following August.

The Comprehensive Exam will assess students' understanding of key concepts and foundational texts in the field of information studies, their knowledge of current research trends in their particular subfield of research, and their readiness to carry out their research moving forward. It covers students' coursework generally, though students are expected to display a depth and breadth of understanding that will likely require the use of literature beyond that found on course syllabi. *Students who started the program before Fall 2025, with permission of their chair, may follow the earlier "essay style" guidelines for comprehensive exams.*

Breadth and Depth

To cover breadth and depth of topic areas for a PhD in Information, all exams will in some way address students' particular areas of research interest, while covering the following three foci:

1. Foundations of information science and key information theories, as identified in collaboration with advisor/committee;
2. At least 2 primary research areas within the College of InfoSci (students may request an additional research area with the approval of their advisor and the Director of Graduate Studies):
    a. Artificial intelligence and machine learning
    b. Information, communication, and society
    c. Cultural heritage informatics, digital humanities
    d. Archives, libraries, and museums
    e. Data science, management, analysis, and visualization
    f. Environmental, health, and biological information
    g. Gaming and virtual worlds
    h. Extended reality (VR/AR/XR) and other immersive media
    i. Human-computer interaction / human-centered computing
    j. Human-AI Interaction
    k. Information policy, law, ethics, and diversity
    l. Social sciences and information behavior/practice
    m. Information organization, access/use, and digital curation
    n. Information management and leadership
    o. Computer supported cooperative work, team dynamics, and virtual teams
    p. Science of Science, and Sociology of Scientific Knowledge
    q. Information design, and UX/UI
    r. Makerspaces, craft, and embodied knowledge
3. Methodology, methods, and research design relevant to the student's topic area.

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Timeline

Completing Coursework and Planning for Exam (typically by summer of year 2): Students should contact their advisor and start planning for their exams as they start their final semester of coursework. Following their final semester of coursework, students will compile a reading list of approximately 30-45 journal articles (or equivalent length of proceedings, chapters, books, etc.) that reflects the above breadth and depth guidelines. Students will share this list with their committee members for feedback. Committee members will make additional suggestions for readings to include in the list. Students will identify readings from their course work, as well as additional readings that support their expected area of dissertation research. Students are strongly encouraged to complete coursework within two years of starting the program and begin preparing the reading list starting in the summer following their second year in the program.

Scheduling the Exam: Once the reading list is approved by the committee, the student works with their advisor/chair to set an oral defense date. The written exam will be due 14 days before the defense date to give committee members sufficient time to review the exam. Students will have 14 days to complete the exam once questions are received from the chair.

The comprehensive exam consists of a written and oral exam:

Written Exam

The written exam consists of two ~6000-word essays responding to two questions provided by the committee. Students may be given up to 4 questions and will choose two to answer. At least one question or prompt will come from each of the committee members. The chair will review the questions from the committee members before sharing them with the student to ensure sufficient coverage of the topic areas covered by the reading list.

Instead of a multiple-question exam, the student's advisor, in consultation with the committee, may decide to require the student to develop a **literature review**. In this case, the advisor will provide examples and guide the student with an appropriate type of literature review, such as systematic, scoping, etc., in advance of the start of the exam.

Oral Exam

The committee has 14 days to review the responses and then hold an oral exam with the student that should not exceed 2 hours (but not less than 1 hour). The oral exam is closed to the public. At the end of the oral exam, the committee will inform the student of the outcome of the exam, which may be "pass," "revise," or "fail." The Graduate College allows no more than one re-take of the oral exam. In case of revision, a deadline will be set by the committee for the student to submit the final revision within 14 days. The **minor portion** of the exam covering a student's minor coursework may or may not happen as a different exam process, depending on the minor department's requirements. *It is the responsibility of the student to understand and alert their major adviser of minor exam requirements.*

After passing the oral exam, the student should give a brown bag/work-in-progress presentation of their exam in the College of InfoSci. The student may voluntarily deposit their literature review into the InfoSci PhD Comp Exam bank, which will be used to help future students prepare.
The Graduate College has additional guidelines that should also be referred to:
https://grad.arizona.edu/degree-services/degree-requirements/doctor-philosophy#comprehensive-exam

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