practicum experience. Students may also choose to work on a real-world research application with strong implementation component with a faculty mentor in their research lab. In this case, the faculty mentor will be the student's Supervising Sponsor. Practicum sites include corporate offices, federal/state/local organizations, national laboratories, research labs, university labs, community-based organizations, non-profit organizations, and other relevant organizations.

4.

Elective course work must be chosen based on   of the student and his or her adviser's mutual research interests. Each student is advised to take such courses as are properly related to academic background and research interests.

> A maximum of sixteen (16) credit hours of Seminar (COSC 6960) or Independent study (COSC 6995/8995) are allowed as electives. Only nine (9) of the sixteen (16) credit hours may be taken as independent study.
> A maximum of twelve (12) credit hours may be taken at the 5000 level.
> A maximum of six (6) credit hours may be taken outside the Department.

> Students must complete 12 credit hours of COSC 8999 - Doctoral Dissertation. Students can start registering for Dissertation Credit hours around the time of their Qualifying Exam, but should not complete all 12 credit hours before passing the Qualifying Exam.

6. Students must pass PhD Qualifying, Proposal, and Dissertation.
7. Students must follow all the graduate school forms and directions listed under "Doctoral Program Forms and Directions" at :

PhD Qualifying Exam Steps

-

- Once the student passes the PhD Qualifying Exam and completes the lecture course work, the doctoral mentor will fill out and submit the "Advancement to Candidacy" form to the Graduate School.

12. PhD Proposal Exam

- The PhD Proposal exam must be taken by the end of the student's fifth semester. If the student is ready,

- It is expected that the student has published as a first author at least one peer reviewed manuscript in a reputed venue (workshop/conference/journal) before the Proposal Exam.
- The PhD Proposal exam consists of a written research proposal of a topic for dissertation and an oral defense of the proposal. The written proposal normally contains a clear problem statement, proposed methods of solution, review of related work, preliminary results of the research work, and a detailed research plan with a specified timeline.
- The student must form the PhD Dissertation Committee (with approval from the Graduate Committee) at least four weeks before the PhD proposal exam ci3T10200>4010201765q0.00000912 0 612 792 re

- Students must conduct original research leading to a dissertation. This final step consists of a written dissertation and an oral defense.
- It is expected that the student has published as a first author at least two peer reviewed manuscripts in reputed venues (workshop/conference/journal) before the PhD Dissertation.
- The written dissertation must demonstrate extensive research and original contribution to knowledge in a given field. The written dissertation must be submitted to the Dissertation Committee at least two weeks before the oral defense of the dissertation.
- The student must prepare a 45-50-minute oral presentation defense of the dissertation followed by additional time for questions. We ask the student to reserve one hour for the defense of the dissertation.
- Students must follow graduate school deadlines in making formal announcements for public defense of their dissertation.
- Once the student passes the PhD Dissertation, the doctoral mentor will fill out and submit the "Dissertation Approval" form to the Graduate School.
- Students must follow all the doctoral dissertation directives mentioned on the graduate school website.

15. Graduate Committee Annual Review

- The Graduate Committee evaluates the progress of all graduate students with respect to coursework, and research.
- Full-time students are expected to attend at least 75% of computer science department colloquia (verified by a sign-in sheet).

COSC 6510 Data Intelligence (3)

COSC 6820 Data Ethics (3)

COSC 6090 Research