Computer Engineering Ph.D. Qualifying Examination
Guidelines for the Graduate Student

The Ph.D. Qualifying Examination (QE) in the Computer Engineering program consists of an oral examination. The purpose of this QE is to assess student’s readiness to conduct research in the student’s chosen field by testing his/her coursework and basic knowledge and ability to apply what (s)he has learned to analyzing research literature. A student entering the Ph.D. program must pass the QE within five long semesters from the date of admission into the Ph.D. program. Students should discuss with their research advisors if they are ready to take the QE, and are strongly encouraged to take the exam as soon as possible.

The result of the QE will be pass or fail, and is determined by two factors: performance in the oral examination (see below) and GPA in graduate-level organized courses. Each student has at most two attempts at this qualifying exam.

Oral Examination:
- A PhD student must declare intent to take the exam in the first two weeks of the semester using the “Application for the Doctoral Qualifying Examination” form. (Deadlines for application will be advertised to graduate students as early as possible each semester.) The student must be registered for the semester in which he/she is taking the QE.
- The members of the student’s QE committee are suggested by the student’s research advisor, and must be approved by the CE Program Chair or his/her representative. It must consist of four (4) tenure track faculty in the student’s general field of study, including at least one tenured faculty member. It is strongly encouraged that at least one member of the committee is not in the student’s field of research, and that there is at least one member from the Department of Computer Science and one member from the Department of Electrical Engineering.
- The student will be given a set of two to four papers from refereed journals or conference proceedings by the QE committee, but none of the papers should have been written by the student and/or the student's advisor(s). The papers should be related to the chosen field of research.
- The student must demonstrate an excellent ability to understand, analyze and present these papers by applying what he/she learned in previous coursework. The student will be given a preparation period of 3-4 weeks in which to read these papers and analyze them using what the student has learned in his/her undergraduate and graduate coursework. In addition to proving that the student can analyze the material quantitatively, the student should explain how the papers are related and identify any limitations to the results presented.
- The student will make an oral presentation of about 20-30 minutes and spend a few minutes talking about his/her goals for doctoral research.
- Finally, the student will have to take at least 20 minutes to answer any questions from the QE committee about his/her presentation, and coursework and basic knowledge related to the student’s chosen field of research.

Evaluation Procedure:
- The final evaluation will be based on two components:
  o The student’s performance on the oral examination.
  o The student’s GPA in graduate-level organized courses.
Based on the above two components, the QE committee will vote and recommend a grade of either pass or fail. At least three members must recommend a grade of pass. Otherwise, the grade will be fail.