

CEN Qualifying Examination

Every student who wishes to pursue the PhD in Computer Engineering must pass a Qualifying Examination. Because the PhD is primarily a research degree, the Qualifying Examination is designed to test the candidate's research skills and abilities. The exam consists of a written research paper and an oral presentation of the research paper to the graduate supervisory committee. The research topic will typically be chosen by the student in collaboration with the committee chair and the graduate supervisory committee. More specifically, the research paper will typically present a state-of-the-art survey of the student's research topic area. The survey should give a comprehensive overview of the existing prior research in the topic area and identify the limitations of the existing approaches in the topic area. Ideally, the survey should present a coarse outline of avenues for addressing the identified limitations through original research that will later form the core of the Ph.D. dissertation. A well-done survey can form the basis for the related work chapter of the Ph.D. dissertation.

The student should take the exam before the end of the fourth semester in attendance at ASU as a PhD candidate. If a student does not wish to take the exam according to the above schedule, but wishes to continue in the program, must petition the School Graduate Program Chair for permission to take the exam at a later date. Petitions must be received well in advance of the required exam date. There is no guarantee that the Graduate Committee will approve such requests.

Students completing a Master of Science degree in computer engineering at ASU can combine the MS oral defense with the qualifying exam. When a student plans on remaining within the same area after completing their MS degree at ASU, the qualifying examination may be taken simultaneously with the final oral defense of the MS thesis. Assuming that the graduate supervisory committee advisor is not changed, this exam will be supervised by the MS committee. These members may, or may not, be part of the doctoral graduate supervisory committee. If the doctoral advisor is not part of this committee, the advisor should be added to the committee. The graduate supervisory committee will be formed when the student's official program of study is filed.

The result of the exam is a pass or fail. A passing result indicates that the committee believes that the student is capable of doctoral research. A failing result indicates that the committee believes that the student is incapable of conducting the level of research required for the PhD. Therefore, students who fail the exam will be removed from the program. The student must submit their report to their committee 10 working days in advance. Once the exam is completed, the student must submit the form (which can be found on our website) and a copy of their report to their assigned academic advisor.