



## Department Qualifying Exam (DQE)

### **The DQE is comprised of 2 components:**

1. An oral presentation discussing the student's present and future research
2. An oral examination

The requirements for these two components are detailed below.

### **Presentation Requirements:** ~15 minutes with questions

Students should prepare a short presentation of no more than 10 slides covering the following topics related to their field of research:

- Overall scope of the research problem. What is the big picture? (~2 slides)
- Brief literature review discussing research that has preceded their study. (~2 slides)
- A short discussion of their research conducted to date (~2 slides)
- Specific research plans for the coming summer (~2 slides)
- Longer-term research goals/plans and how their current research will lead them toward those goals (~2 slides)

Students are strongly encouraged to discuss their presentation material with their adviser prior to the exam.

### **Oral Exam:** ~45 minutes

The presentation will be followed by a 45-minute oral exam conducted by three CaSE professors (the student's advisor and 2 others). Each professor will ask questions to the student, who will respond orally and in writing.

**Topics for questions** are at the professor's discretion, but will generally fall within the following categories:

- Questions directly related to the student's presentation
- Questions related to the student's research and/or research topic
- Fundamentals that are deemed important for research in the student's focus area

\*For example, students who conduct research in structural dynamics may be asked questions on solving ordinary differential equations.

- Questions related to courses the student has taken at Johns Hopkins
- Questions related to courses that serve as prerequisites to courses the student has taken at Johns Hopkins

**Outcome:**

Possible outcomes of the exam are Pass, Retake, or Fail. Only an outcome of Pass is considered passing the exam. If the outcome of the exam is Fail, the student is dismissed from the PhD program. The student may pursue, with approval from the chair, a Master's degree. Financial support for a student beyond a failed DQE is not typical. If the student receives a Retake, they are provided a single retake of the exam, typically in the Fall of the second year. Possible outcomes of this exam retake are Pass or Fail.