Examination Policy for CE-Engineering Science Graduate Program

Ph.D.:
A. Prelim Exam:
Students should nominally take the prelim exam within the first yr.  
1-day written exam will be administered once a year in May:  
Format: 10 questions total - closed book  
Choice of  
• 3 questions on applied mathematics  
e.g., Advanced Engineering Mathematics by Wylie  
   An Introduction to Applied Mathematics by Gilbert Strang  
• 3 questions on general mechanics  
e.g., Continuum Mechanics by Spencer/Chadwick  
   Introduction to the Mechanics of a Continuous Medium by Malvern  
• 2 questions on numerical methods  
e.g., Fundamental of Engineering numerical analysis by Parviz Moin  
   The Finite Element Methods: Linear Static and Dynamic Finite Element Analysis  
   by T. Hughes  
• 2 questions on general engineering applications (solids, fluids, geomechanics, heat transfer, biomech, glacialogy, chemistry, ...)

B. Comprehensive Oral Exam:
Format: Oral exam portion should have 2 parts:  
• Part 1: general questions on STEM fundamentals and knowledge; readiness to do independent research  
• Part 2: a thesis research proposal

C: Thesis defense
Format: Oral exam.

All established university and general departmental rules apply to degrees in the CE-Engineering Science graduate program.

2/28/2011