Mechanical Engineering Subject Qualifying Examination

**Timing:** Prior to taking the ME qualifying examination, all PhD students must have a research advisor and have been actively involved in research for at least one semester (e.g. a summer). Both post BS and post MS students will take the ME qualifying examination during their third semester. If necessary, students can try a second time during their fourth semester. If a second attempt is required, the student shall repeat the entire exam. After failure a second time, the student is asked to leave the program on grounds of inadequate progress.

**Coverage:** In consultation with his/her advisor, the student identifies a core area and a breadth area. These areas are to be selected from among the concentration areas listed on the MS Program Planning Sheet. The student selects two subjects (i.e. two course titles) from the core area, and one subject (i.e. one course title) from the breadth area. The course selected as the breadth subject may not be cross-listed in the core area.

**Procedure:** In consultation with his/her advisor, the student selects an exam committee consisting of three faculty, each designated to examine one of the three subject areas. The research adviser is excluded from consideration. At least one month prior to the exam, the student must submit a “Qualifying Exam Schedule Form”. The form certifies that each member of the exam committee has agreed to serve, has agreed to examine the designated subject area, and has met with the student to discuss exam coverage in that area. Approximately one week prior to the exam, the student’s research advisor submits a confidential letter of recommendation to the graduate coordinator. This letter will be made available to the exam
committee prior to the exam, to be considered as part of total evaluation.

**Nature of the Qualifying Examination:** The examination consists of two components. In the first, the student gives a brief (15-20 minute) oral presentation describing research progress. This is to be followed by open questions from the exam committee. The committee is expected to ask questions about the research presentation and about their assigned subjects. The total exam time should be no more than 1 ¾ hours. The disposition of time between the committee members, and between research versus subject questions, shall be left to the discretion of the exam committee.

**Results:** A closed meeting of the exam committee shall deliberate immediately following the exam. During such time, the committee will produce a written evaluation of the student’s performance in the subject areas and in the research section, with possible recommendations for remediation. An overall evaluation of pass/fail will be provided, based on the following criterion: “Given the evidence available to us, we believe this student will be successful in the PhD program in Mechanical Engineering at Boston University.” At the end of the deliberation, the exam committee provides a copy of the written evaluation to the student and to the Graduate Program Coordinator.

Upon successful completion of this qualifying exam, the PhD student is to present a thesis prospectus within two years.