# **EE PhD Diagnostic Exam Procedures**

Updated: Sunday, July 19, 2009

1. A *Standing Diagnostic Exam Committee* will be formed from EE graduate faculty to make up the exam, administer it, and make pass/fail decisions.

Committee is to be made up of one elected representative from each of the EE Department's thrust areas. The committee will rotate members every two years. No member can stay on the committee twice in succession. The 2-year terms will be staggered, with half the committee being renewed every year.

- 2. The diagnostic exam will be offered two to three weeks before the *end* of each long semester.
- 3. Full-time Students must take the exam for the first time by the end of their second long semester after being classified as a PhD student. The student has 2 attempts to pass the exam. The second attempt, if required, must not be later than the third long semester after being classified as a PhD student.
- 4. Part-time students must file a plan of study, to be approved by their dissertation adviser and the EE Graduate adviser, for their schedule in taking the exam. The exam should be taken the first time no later than in the long semester during which the student achieves 18 credit hours.
- 5. Students not taking the exam according to the prescribed schedule will be considered to have one 'fail' on record.
- 6. UTA MS students considering entering the PhD program may take the exam one time before admission to the PhD program on a no-fault basis. That is, this attempt, if failed, will not count towards their two attempts after entering the PhD program.
- 7. Students in the Direct PhD track having fewer than 24 credit hours of coursework may take the exam one time on a no-fault basis. That is, if this attempt fails, they will still have two attempts remaining.
- 8. Passing Grade for the Diagnostic Exam

For both the first and second attempts, the pass/fail thresholds are as follows:

- Pass Students pass all parts of exam with at least 80% in the major area, and 70% in each selected minor area. Student is encouraged to continue PhD program and form a Dissertation Committee.
- Fail Students make below 70% in the major, or below 60% in both minors, or below 50% in any one minor.
- TBD When students' performance falls between Pass and Fail, committee will consider each individual case and make recommendation to Pass, Fail, or PRW (Pass with

remedial work, see below) the student. Diagnostic Exam Committee recommends on the type of remedial work for those students who have received PRW from the diagnostic exam. Faculty will vote on each individual case to make final decision. Student with PRW status is encouraged to continue with PhD program provided remedial work is completed satisfactorily.

9. The committee reserves the right to look more closely at a student with scores within a few points of the cutoff grades.

#### 10. Journal Publications.

Students with at least one accepted, peer-reviewed journal paper who fail their second exam will be reevaluated by the committee. The student must be the first author.

11. Diagnostic Exam Committee decides on the type of remedial work for those students who fall into the category of PRW on their second attempt.

The committee may use information such as the following as it formulates its decision for PRW students:

- (i) Performance on the Diagnostic exam.
- (ii) Advice of the PhD Adviser.
- (iii) An evaluation of the student's prior undergraduate and graduate academic record.
- (iv) Grades in the graduate program with course level, course load, and workload considered.
- (v) Evaluation by faculty who have had the student in class or on teaching or research assignments.
- (vi) Interview of the student.
- (vii) Research productivity and publication record.

## 12. Format of the exam

1 exam of 4 hours duration.

Given on a Saturday, two to three weeks before the end of each long-semester Student designates a major area and two minor areas when signing up for the exam.

Each Thrust Area will have 3 problems on the exam.

Each student selects 2 problems to work out of the 3 from each of 3 thrust areas.

If the student works more than two problems from one thrust area and does not specify which ones are to be graded, only the first two will be graded.

Exam will be administered by the PhD Graduate Adviser.

Exam covers graduate core course material.

Coverage of exam to be posted on web.

The Diagnostic Exam Committee will post the material to be covered by the exam on the web to aid the student in studying for the exam. Material will be posted at least 12 weeks before exam is given. Each thrust area will identify material for coverage of its topics on the exam, which may consist of course lists, books recommended for study, lists of topics, etc.

Problems included from all thrust areas.

Each thrust area will prepare three questions made by at least two professors from the EE graduate faculty for each thrust area. Each question will be worth 50 points. Each question will be designed to be workable within 30 minutes or less.

Each question will be graded by at least two professors of the EE graduate faculty, and the thrust area must agree on all grades for its problems.

Each student will be identified by a double-blind numbering system during grading. The identity of students will be revealed during the Diagnostic Exam Committee deliberations.

#### 13. Outcome

The committee will take no more than two weeks after the exam is given to arrive at its decisions.

Outcome of the diagnostic exam and the committee's decision will be transmitted to the student and the thesis advisor by formal e-mail or a written letter within one week of the decision.

Exam solutions will be posted on the web.

Graded exams will not be shown to or returned to the students.

Adviser will be allowed to see their student's exam if they desire.

Results will be reported for each student in terms of the categories:

- 1. Pass with approval to continue in the PhD program
- 2. Pass with approval to continue in the PhD program on completion of required remedial work
- 3. Fail with option to retake the exam.
- 4. Fail with termination.

### 14. Petitions

Petitions for extraordinary situations may be filed by the student or the dissertation adviser. This includes petitions to take the exam later than the second long semester after being admitted as a PhD student, as well as petitions to attempt the exam more than two times. Petitions for a first exception will be determined by the dissertation adviser and the EE Graduate Adviser. The Graduate Adviser will report on such petitions to the graduate faculty in the next scheduled Faculty meeting. Petitions for second exceptions must be approved by the full graduate faculty.

# This recommended procedure complies with the UTA graduate Catalog-Diagnostic Evaluation

During the student's first year of doctoral program work, the student must demonstrate potential to successfully complete a degree program. The method of assessing the student's potential will be determined by the appropriate Committee on Graduate Studies and may be in the form of a written or oral examination, personal interviews with faculty members, successful completion of certain courses in the first semester of residence, or by any combination of these methods. Results of the diagnostic evaluation may be: 1) approval to continue in the doctoral program; 2) approval to continue with specified remedial work; 3) failure, but with permission for assessment through a second diagnostic evaluation after a specified period; or 4) failure and termination in the program.

The diagnostic evaluation report must be filed in the Graduate School by the student's Graduate Advisor during the student's first year of doctoral program work but no later than the completion of the first 18 semester hours of coursework beyond appropriate master's level coursework, or the equivalent.