

UNIVERSITY OF MASSACHUSETTS  
COLLEGE OF ENGINEERING  
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING (ECE)

**DOCTORAL/Ph.D. DEGREE REQUIREMENTS**  
**(for students matriculated AFTER Fall 2003 only)**

1. **Credit Requirements:** *Minimum number of dissertation credits required:18.* The department requires no minimum number of credits beyond the completion of the required “core” courses for a doctoral program, with the exception of dissertation credits and seminar. Registration for a one credit seminar course (ECE 793-Fall & 794-Spring) is **MANDATORY** for all students registered for credits (students paying program fee are exempt). This seminar credit does not count toward graduation requirements.
2. **Residency Requirements:** A doctoral candidate must spend the equivalent of at least one academic year of full-time graduate work (minimum **9** credits per semester- no exceptions) in residence at the University. The residency year must be either Fall/Spring or Spring/Fall sequence. During this year, the student must spend some part of each week physically on campus.
3. **Language Requirement:** Not required
4. **Preliminary Comprehensive Examination:** The Preliminary Comprehensive Exam consists of two (2) parts: (1) The Core Requirement: Four-course core curriculum *in residence* (see “Ph.D. Comprehensive Examination Policy - Revised 12/03”); (2) Research Qualifying Exam: Documentation and presentation of a research project involving the formation of a four (4) member committee; submission of documentation and an oral presentation (see “Ph.D. Comprehensive Examination Policy - Revised 12/03”).
5. **Research Qualifying Examination Results:** The result of the Research Qualifying Examination (Oral Comprehensive Examination) is announced to the ECE Graduate Program Director by the student’s faculty advisor.
6. **Doctoral Dissertation Committee:** As soon as possible after the student has completed all core requirements and passed the Research Qualifying Exam (passed the Preliminary Comprehensive Exam), the Doctoral Dissertation Committee is formed by the student and nominated to the Graduate Program Director by the student’s proposed Committee Chair.

*From the Graduate Student Handbook:* The dissertation committee is composed of **at least** three (3) graduate faculty members; the chairperson, 1 other member from the candidate's department, and 1 member from outside the candidate's department. [Only on rare occasions are committee members appointed outside of UMass 5-college campus (see p. 52). Note: To appoint a non-voting outside member, a curriculum vitae is needed.] Members of the Dissertation Committee must agree to not only assist in the supervision of the dissertation project, but also conduct (be present at) the Final Oral Examination (Final Dissertation Defense). Students should remember that most faculty are on a 9-month contract and should not assume that committee members will be available during the summer months. The Graduate Dean makes the official committee appointment. **The committee is officially constituted when the Graduate Dean sends formal notification (letters) of its formation to each committee member, the Graduate Program Director, and to the student.**
7. **Dissertation Credit Requirement:** The total number of dissertation credits (ECE 899) required are 18 credits. There is no maximum number of dissertation credits to which a student is limited; however, a student can register for only a maximum of nine (9) dissertation credits per semester. Doctoral candidates will not be recommended to the Board of Trustees for graduation unless they have the requisite minimum number of dissertation credits (18) and have met all degree requirements.
8. **Dissertation Prospectus/Outline:** After completing the core requirements and passing the Research Qualifying Exam (passing the Preliminary Comprehensive Examination), the graduate student must prepare a dissertation prospectus/outline describing the research to be conducted, analyzed, and presented in the dissertation. The cover sheet must be signed by each member of the Dissertation Committee to indicate approval of the topic and its plan of execution. The prospectus/outline must be received by the Graduate School at least seven (7) months prior to the Final Oral Examination/Dissertation defense.

## **DOCTORAL DEGREE REQUIREMENTS (AFTER Fall 2003 only)**

9. **Announcement of Final Oral Dissertation Defense:** At least seven (7) months following the presentation of the dissertation outline, the student must schedule the final oral dissertation defense in consultation with his/her committee chair. Written notification of the scheduling of a Final Ph.D. Oral Defense must be sent to the Office of Degree Requirements by the Graduate Program Director no less than three (3) weeks prior to the date of the defense (up to 4 weeks during summer schedule). The exam must be held on campus. All members of the Dissertation Committee must be present at the defense. An examination/Defense cannot be held unless it has been publicly announced by the Graduate School.
10. **Final Oral Dissertation Defense Results:** Immediately following the final defense, the members of the committee present must sign the original dissertation signature sheets in indelible black pen. The Department Head's signature will be obtained by the Academic Programs Office and the original sheets returned to the student. A copy will be kept in the student's permanent file. The student is responsible to deliver the original dissertation to the Degree Requirements Office. The results of the final defense are sent to the Graduate School by the ECE Academic Programs Office.
11. **Dissertation:** The dissertation must be typed in a prescribed format on acid-free paper. Refer to the handout entitled Typing Guidelines For Master's Thesis and Doctoral Dissertation, available on-line and on paper in the Office of Degree Requirements. The dissertation must be approved and signed by all members of the dissertation committee in black indelible pen. Following notification to the GPD that the student has passed the final defense (including submission of the signature sheets), the ECE student submits the original dissertation and one copy to the Office of Degree Requirements. The Graduate School is the final and only arbitrator of what is an acceptable dissertation.
12. **Degree Eligibility Form:** The Ph.D. Degree Eligibility Form is obtained from the ECE Academic Programs Office. It must be completed by all doctoral degree candidates and submitted to the ECE Academic Programs Office for signature/approval by the Graduate Program Director and the Department Head at least ONE week prior to the official Graduate School posted deadline with a current printed SPIRE unofficial transcript attached. The completed form will be sent to the Graduate School by the ECE Academic Programs Office following approvals. The student is responsible to submit the dissertation, all appropriate fees, and the Survey of Earned Doctorates and University Microfilms forms to the Office of Degree Requirements by the posted deadline. **These deadlines are strictly observed and will not be extended. Degrees cannot and will not be awarded retroactively.**