DOCTORAL PROGRAM – 2009
(for students entering Summer 2007 and after)
Electrical and Computer Engineering, University of Oklahoma

I. COURSE REQUIREMENTS AND RESTRICTIONS
- At least 90 hours beyond the Bachelor’s degree (including any approved M.S. degree work, post-M.S. work, and/or transfer course work, all of which may not exceed 44 hours)
- At least 9 hours course work in the major area of concentration
- At least 9 hours ECE technical electives
- At least half the course work (does not include dissertation credits) must be ECE, Computer Science, or TCOM courses

See specific course requirements below for the Qualifying Examination that will overlap with the above requirements.
- At least 9 hours course work in math and/or physics
- At least 30 credit hours dissertation research
- After initial enrollment in Dissertation Research (ECE 6980), continuous enrollment in a minimum of 2 credit hours is required (excluding summers, except when graduating) until completion of the degree.
- All course work must be 4000-level with graduate credit and higher.
- Maximum 16 hours of 4xxx-level course work, out of which no more than 12 hours may be ECE
- ECE daggered (+G) course work is not allowed for degree requirements.
- Any cross-listed course must be taken as and counted as ECE course work.
- 9 hours maximum credit for special studies (total of all 5990’s taken)
- 12 hours maximum credit separately for each category: ECE 5973’s, ECE 6973’s, ECE 5283’s, 6283’s

II. QUALIFYING EXAMINATION (ENTRANCE EXAM/COURSE WORK COMBINATION)
(Also refer to the separate policy information for further detail.)

Entrance Exam
- All incoming Ph.D. students without Master’s degrees in ECE, Physics, Biomedical Engineering, Telecommunications Engineering, Computer Science, or other closely related disciplines will take a Ph.D. Entrance Exam at the end of the first fall semester.
- The exam will cover the most basic concepts in the areas of: i) Signals and Systems, ii) Circuits, iii) Electronics, and iv) Computers
- Students who fail the exam will be given a second chance in the following fall semester.
- Students who fail the exam twice can no longer be in the ECE Ph.D. program. These students may be considered for the Master’s program, provided that they do not hold a Master’s degree in ECE.

Students who do not hold a BS or MS degree in Electrical and Computer Engineering can defer the exam to the second year, with it being recommended that they take leveling courses first.

Course Requirement
- All Ph.D. students are required to take four graduate level courses from a departmental list of approved courses in one of the following areas: i) Computers, ii) Signal Processing, iii) Solid State, iv) Telecommunications, v) Radar Engineering, vi) Biomedical Engineering, vii) Communications, viii) Controls, and ix) Power. Each area will include 4 – 6 courses. This course work must be completed in the first year of study. Students who complete the required courses with a GPA of 3.5 or higher in the best 4 courses that satisfy the courses requirement will be considered to have passed the course requirement portion of the exam.
- Students with an MS degree in ECE can petition to be exempt from the previous course requirement, if it can be proven that this requirement has already been met as part of their MS degree program.

III. PUBLICATION REQUIREMENTS
- A published research paper is a prerequisite for the Ph.D. General Examination.
- Prior to the dissertation defense, a paper must be presented at a regional or national conference with proceedings and a research paper must also be published or accepted for publication in a major journal using the peer review process.

IV. ADDITIONAL PRE-DEFENSE REQUIREMENT
The student must hold an open seminar to present the research for the dissertation at least two months prior to the Final Oral Examination (dissertation defense). Written notification of the seminar must be submitted to the graduate coordinator at least one week in advance for distribution to the general faculty and to students of the School.

V. RESIDENCY REQUIREMENT
Must be in residence at the University at least two full semesters excluding summer sessions and be engaged in
VI. **MINIMUM STANDARDS OF PERFORMANCE**

- At least 3.00 overall GPA
- At least 3.00 GPA in graduate course work
- Nine (9) hours or more of C, D, F in any combination, will cause dismissal from a doctoral program and enrollment in another doctoral program will not be allowed by the Graduate College.

VII. **TIME LIMITS**

- 4 years allowed for completing the General Examination, if holding a Master’s degree
- 9 years to complete the program

**REQUIRED PROCEDURES (brief form):**

- **Choose advisor** (immediately after beginning PhD studies): The Graduate Liaison may serve as general advisor for initial enrollment and planning. Choose own advisor before the next enrollment.
- **Commence ECE PhD Qualifying Examination:** If applicable, the Entrance Exam component must be taken at the end of the first fall semester in the program. A maximum of two attempts will be allowed, and any second attempt must be completed the next semester the examination is offered. The Course Requirement component must be completed in the first year of study.
- **Form Advisory Committee:** The major professor (ECE Graduate Faculty advisor) plus four other members, one of whom must be out-of-department faculty, will form the student’s advisory (doctoral) committee. All members must be appointed members of Graduate Faculty (which includes HSC). Graduate Faculty from other campuses may still serve as members but may not serve as the designated out-of-department member. There may be only one Special Graduate Faculty member unless the total number of committee members is increased accordingly. (Tulsa campus is considered to be the same as Norman campus for these purposes.)
- **Hold Advisory Conference within the first year of study:** The student’s Advisory (Doctoral) Committee will approve a plan of study. The student must prepare the plan on an Advisory Conference Report form and meet with the Advisory Committee. The Advisory Conference Report must be signed by the Advisory Committee and Graduate Liaison, after which it is submitted to the Graduate College.
- **Changes in Advisory Conference Report:** Any change(s) in the program approved on the Advisory Conference Report must be made by way of a Request for Change in Advisory Conference Report form. Consult the Graduate College Bulletin at [http://gradweb.ou.edu/Current/gcBulletin/index.asp](http://gradweb.ou.edu/Current/gcBulletin/index.asp) for the different policies regarding the necessary signatures, depending upon the change(s). When the appropriate committee members have approved changes, the Graduate Liaison must sign, after which it is submitted to the Graduate College.
- **Initiate dissertation research** (when the major professor advises): This must be discussed with the major professor (advisor) to determine a topic and appropriate time to commence official enrollment in research credit hours. The continuous enrollment rule then goes into effect.
- **Take the General Examination** (within 4 years for students with Master’s degrees or within 5 years if no Master’s degree): The student must prepare for the General Examination (Exam) when nearing completion of course work. The General Exam must be completed within four calendar years of the first enrollment in any post-Master’s course used toward the doctoral degree (which may not correspond to the admission semester), if the student holds a Master’s degree. The Application for the General Examination form must be signed by the student’s Doctoral Committee and the Graduate Liaison, after which it is submitted to the Graduate College (ten days prior to commencing the exam) to receive official authorization. Written and oral parts of the exam are required and must be taken during the semester that has been authorized. All Doctoral Committee members must be present for the oral portion of the exam. The committee will indicate the outcome of the entire exam on the Report of General Examination form, which the candidate must then submit to the Graduate College. (Refer to pages 62-63 of the Graduate College Bulletin, [http://gradweb.ou.edu/Current/gcBulletin/GCBulletin.pdf](http://gradweb.ou.edu/Current/gcBulletin/GCBulletin.pdf) for complete information.)
- **Proceed with and complete dissertation research** (as approved by major professor and Doctoral Committee): When the dissertation is completed, the major professor must approve the reading copy (not the final copy) of the document before it is given to the Doctoral Committee. A Graduate College degree check must be officially requested at least two weeks prior to submission of the reading copy to that office. The reading copy with abstract must then be submitted to the Graduate College, accompanied by a Request for Authority for Defense of Dissertation form that has been approved by the advisor and the Graduate Liaison. If the reading copy and a degree check are satisfactory, Graduate College will give authority for the Final Oral Examination (defense) of the dissertation. The student must notify the ECE Graduate Office of the date at least one week in advance for the office to announce the defense to faculty and students. A reading copy should also be submitted to be available for interested parties. After satisfactory completion of the defense, the Doctoral Committee must report the results to the Graduate College by signing the Authority for Final Examination form. After the defense, the final copy of the dissertation must also be prepared for deposit in the main library. To assure graduation, the academic calendar deadlines, published online in the semester schedules at [http://www.ou.edu/enrollment/home/classes_offered/schedules.html](http://www.ou.edu/enrollment/home/classes_offered/schedules.html) must be heeded.

**Check all Graduate College Ph.D. policies at [http://gradweb.ou.edu/Current/gcBulletin/index.asp](http://gradweb.ou.edu/Current/gcBulletin/index.asp) and the Graduate Bulletin for other university requirements and more helpful information. Some ECE requirements and restrictions are in addition to those of the Graduate College.**