ECE 1\textsuperscript{st}-year PhDs Meeting & RPC Exam Procedures

Spring 2015
Top Priority

• Find a Research Advisor before RPC Exam. IT IS NOW A REQUIREMENT TO PASS RPC EXAM

• Best Ways to Find Advisor: Take his/her course and do extremely well in it; Volunteer to work in his/her Lab; Show off your strengths.

• Always Remember: Funding is more important than the specific research topic
GPA and Credit Requirements

• Maintain a cumulative GPA of 3.00 to remain in good academic standing and to graduate. All graduate courses are counted in the GPA. Only grades of B- or better fulfill PhD curricular requirements.

• A minimum of 32 credit hours with at least 16 credit hours of research/dissertation are required beyond MS degree.

• Post-bachelors doctoral students will be awarded MS degrees upon completion of 32 credit hours (meeting MS requirements).

• Must do a teaching practicum for 8 credits.
Timeline of Requirements for PhD Students

• *PhD candidacy* must be achieved *at the latest by the end of the fifth semester into the PhD program*. Candidacy is achieved by satisfactorily completing the the *ECE Qualifying Process*.

• *Prospectus Defense* must be scheduled *within 2 years of achieving PhD Candidacy*.

• *Completion of Entire PhD Program* must take place *within 5 years of achieving PhD Candidacy*. 
PhD Qualifying Process

• The ECE PhD **Qualifying Process** requires the admitted PhD student to satisfy a **Technical Preparation Criterion (TPC)** and a **Research Preparation Criterion (RPC)**.
Satisfying TPC

- **Post-BS PhD** students are required to satisfy **TPC** within their first 3 semesters. They can do this by taking **4 ECE graduate courses**, at least 3 of which are closely related to their intended area of research, and obtaining a **GPA of at least 3.7** across those 4 courses.

- **Post-MS PhD** students are required to satisfy **TPC** within their first 2 semesters. They can do this by taking **2 ECE graduate courses**, at least 1 of which is closely related to their intended area of research, and obtaining a **GPA of at least 3.7** across those 2 courses.
Courses For Satisfying TPC

• All these courses must be selected from the list of Master’s Specialization courses, listed in the back of the MS Planning Sheets.
• All of these courses must be ECE Courses.
• Courses “closely related to your research” must be from a single Master’s Specialization area.
Satisfying RPC

• All PhD students are required to satisfy RPC by the end of the summer that follows the completion of their first 2 semesters (fall/spring).

• They can do this by passing a **1.5-hour oral examination**, scheduled by the department in the early part of the summer, in which **3 ECE faculty members** assess the research abilities of the student. The assessment is carried out in the context of a recent research article and its background from the field of the student’s intended PhD research.

• Students who do not pass the oral examination on their first attempt are allowed one additional attempt later that same summer.
RPC Exam
Procedures-1

• By Friday, Jan 30, you must select for the RPC Exam a **Base Course** from your intended area of specialization. The Base Course must be from one of the MS specialization areas of the ECE Department. The Base Course should be one that provides significant conceptual and theoretical background for understanding the research article you will ultimately undertake to study for the RPC.

• By Friday, Feb. 6 you must specify 2 of 3 dates that you would be willing to take exam: Fri May 16, Fri May 23, Fri May 30.

• By Friday, Feb. 13 you must submit a list of **3 proposed articles** and the **name of 1 ECE faculty member** who has approved each article on that list for potential use as the article you shall study for the RPC Exam.
RPC Exam
Procedures-2

• By **Friday Feb 27** the ECE Department will assign you one of the research articles on your proposed list for the RPC Exam. *Note*: The Department may earlier on ask for additional proposed articles if none of your 3 initially proposed articles are deemed satisfactory for RPC Exam purposes.

• **Early March**: Workshop on writing RPC Report and preparing RPC presentation.

• **April 20**: 10-page *report* on chosen journal article must be submitted to Austin in ECE office.

• **May 15, May 22, or May 29**: 30-minute *presentation* on your report, followed by at most 60 minutes of *discussion* of the report and the journal article
How to select articles

• Articles should have been published in *prestigious journals* in your intended area of specialization *within the last 5 years*.

• In certain fields of *computer engineering*, articles from the proceedings of prestigious international conferences within the last 5 years may be selected.

• Selected Articles should be *approved* by an ECE faculty member who has expertise related to the selected articles. It is highly recommended that you also ask ECE faculty members for article suggestions.

• No two students will be allowed to study the same article.

• Articles used in RPC Exams in previous years are not allowed.
What Should Report Show?

• You have a solid **technical understanding** of the journal article, including its **background** (particularly as related to your **selected specialization course**).

• You have an **appreciation** of the **open problems** in the area to which the journal article belongs.

• You can produce an **original** and **well-written** report that succinctly gets across the points you want to make. It must include an appropriate **bibliography** with **appropriate citations** made whenever pertinent.

• You are not a potential plagiarist. If you use someone else’s words, figures, pictures, diagrams etc., please cite the source!
RPC Report and Presentation Workshop

• In early March, we will schedule a workshop that will focus on how to write the RPC report and how to prepare the RPC presentation