

Requirements for Graduation

PhD in EECS

Prasad Kulkarni

(Credits: Dr. Jim Stiles)

Master's or No?

EECS offers **two paths** to the PhD!

Path 1: Post-Master's

Earn a Master's, and **then** become a PhD student.

Path 2: "Fast Track"

Earn a Bachelor's and then become a PhD student—**no Master's** is earned.

Post-Master's PhD

Requirements:

- * Successful completion of a **Master's degree**.
- * EECS 802 (!).
- * Minimum of **18 credit hours** of approved **course work**.
- * Minimum of **18 credit hours** of doctoral dissertation (**EECS 999**).
- * Pass **Qualifying Exam**.
- * Pass **Comprehensive Exam**.
- * Complete and successfully **defend dissertation**.

Post-Master's PhD: Course Requirements

- * Minimum of **18 credit hours** of approved course work.
- * **EECS 802**
- * **Minimum of 15** credit hours of course work must be EECS numbered **700 or higher**, excluding Directed Graduate Reading (EECS 801), Master's Thesis (EECS 899), and Post-Master's Research (EECS 998).
- * Thus, 3 hours can be **a)** outside EECS, or **b)** at 500-600 level
- * Minimum of **18 credit hours** of doctoral dissertation (**EECS 999**). EECS 999 hours can only be counted toward degree **after passing the Comprehensive Examination**.

These courses must be described in a **plan of study**, and approved by your advisor and committee.

Fast-Track PhD

Requirements:

- * Successful completion of a **Bachelor's degree**.
- * EECS 802 (!).
- * Minimum of **42 credit hours** of approved **course work**.
- * Minimum of **18 credit hours** of doctoral dissertation (**EECS 999**).
- * Pass **Qualifying Exam**.
- * Pass **Comprehensive Exam**.
- * Complete and successfully **defend dissertation**.

Fast-Track PhD: Course Requirements

- * Minimum of **42 credit hours** of approved course work.
- * EECS 802
- * **Minimum of 30** credit hours of course work must be EECS numbered **700 or higher**, excluding Directed Graduate Reading (EECS 801), Master's Thesis (EECS 899), and Post-Master's Research (EECS 998).
- * Thus, 12 hours can be **a)** outside EECS (but no more than 9 hours), or **b)** at 500-600 level (but no more than 9 hours).
- * Minimum of **18 credit hours** of doctoral dissertation (**EECS 999**). EECS 999 hours can only be counted toward degree **after passing the Comprehensive Examination**.

These courses must be described in a plan of study, and approved by your advisor and committee.

Doctoral Committee

Students must select a major **advisor** and a doctoral **committee** within their **first semester** in the program.

- * Doctoral committees must consist of a minimum of **at least five** Graduate Faculty members and is chaired by the major advisor.
- * The **advisor** and **at least two other** members of the committee must be tenured or tenure-track **EECS** Graduate Faculty.
- * **One** committee member **must be** an “independent” KU faculty member from **outside** of EECS.

The committee guides the plan of study, participates in the comprehensive and final examinations, and helps select a topic for research.).

Qualifying Exam

The department has **changed** its qualifying exam procedure.

More on this later!

Comprehensive Exam

After completing at least **two-thirds** of the course work requirement, students must pass the Comprehensive Examination.

- * Before the exam, **submit a detailed proposal** for a possible dissertation.
- * The doctoral committee will conduct an **oral examination** that evaluates a candidate's proposal and overall knowledge.

At least **three weeks before** the intended Ph.D. comprehensive exam, a student must do the following:

- * Verify your **plan of study** is complete, correct, and on file in the EECS Graduate Office.
- * **Schedule a time** and location for defense with committee members and coordinate with staff to reserve the room.
- * Submit completed **Ph.D. comprehensive exam notice form** to the EECS Graduate Office.
- * Distribute a **written Ph.D. dissertation proposal** to your committee
- * Prepare a proposal **presentation**.

Comprehensive Exam: Keys to Success

In your proposal, make sure you **answer these questions**:

- * What **problem** am I attempting to solve?
- * Why is it **important** that I solve it?
- * What techniques have been used to solve it in the **past**? What **problems** or limitations did these techniques exhibit?
- * What **new** techniques or ideas do you propose to use to **solve** this problem?
- * **Why** do you think **your** solution will work?
- * How will you **evaluate** the effectiveness of your solution?
- * How will you know when you are **finished**?

Doctoral Dissertation and Final Oral Examination

At least three weeks(!) prior to your doctoral defense:

- * Check with faculty advisor, the EECS Graduate Office, and the Engineering Dean's office to ensure all **degree requirements have been completed** and your dissertation meets University specifications.
- * Verify your **plan of study** is complete, correct, and on file in the EECS Graduate Office.
- * Schedule a **time and location** for defense with committee members and coordinate with staff to reserve the room.
- * Submit completed **Ph.D. dissertation defense notice form** to the EECS Graduate Office.
- * **Distribute** a written Ph.D. **dissertation** to your committee.
- * Prepare a dissertation **presentation**.

Doctoral Dissertation and Final Oral Examination

After your doctoral defense, you must do the following:

- * Make **final corrections** to your dissertation as directed by your committee.
- * Get the title page and acceptance pages **signed** by all committee members.
- * Deliver the signed pages to the Engineering Dean's office.
- * **Submit Dissertation online.**
- * Deliver **bound copies** to committee members (if requested).

Doctoral Dissertation and Final Oral Examination: Keys to Success

- * You must **take ownership** of your research—it is **your** dissertation, not your advisor's!
- * You must **master** all the tools and techniques required for your dissertation—this will take work, lots and lots of **work**.
- * Write your dissertation as you go—be sure to **carefully document** and record all your results.
- * Diligently **craft** your dissertation document; carefully write and **rewrite** your prose. Have it **reviewed and edited** by colleagues and professionals.
- * The most important chapters are the **Introduction** and the **Conclusion**.
- * I did this **because...**; I then got this result, and **therefore...**

PhD Activity Report (PHAR)

Students are required to submit an **annual** PhD Activity Report (PHAR), which is used to **assess academic progress**.

- * A student who receives a **second unsatisfactory evaluation** will be placed on **academic probation**.
- * Academic probation will be removed upon **substantial progress** as documented in the student's **next PHAR**.
- * Without substantial progress toward the degree, the student's PhD status will be **terminated**.

Key to success: Stay a **full-time** student in **Lawrence**, until your dissertation has been defended.