ELECTRICAL AND COMPUTER ENGINEERING (PHD)

Graduate School

Program Website (https://www.engineering.cornell.edu/ece/)

CIP: 14.1001 | **HEGIS:** 0909.00 | **NYSED:** 76420

Graduate Field

Electrical and Computer Engineering (https://catalog.cornell.edu/graduate-school/electrical-computer-engineering/)

Program Description

The Ph.D. program is intended to train students for leadership positions in teaching and research. Entering students are admitted directly to the Ph.D. program; a Masters Degree is not a requirement for admission. Before doctoral degree candidates begin the second year of study, they must take a Qualifying Examination, consisting of Subject Area Examinations that are administered by the ECE Faculty.

Concentrations

- Electrical engineering; electrical systems; electrophysics
- Computer engineering

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 144

Program Requirements

- Minimum Semesters for Degree: 10

Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Student Progress Reviews (SPR) begin: Second Year
- Examination for admission to candidacy (A Exam): Third Year
- Defense of Dissertation (B Exam): Spring of fifth year

Field Specific Milestones

- Qualifying Exam (Q Exam): Spring of first year
- Field progress review: Second year
- Subject Area Examinations annually at the end of the spring semester

Course Requirements

- Electrical and computer engineering Ph.D. students are required to enroll in at least eight (8) credit hours of electrical and computer engineering courses, earning a letter grade of a "B" or better. All courses should be at the 5000 Level or above. Students must complete the eight (8) credit hour course requirement prior to the completion of their Admission to Candidacy Examination (A Exam).
- Enrollment in a GRAD research course or the equivalent field specific research course is expected of all students.

University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (https://registrar.cornell.edu/service-resources/college-registrar-directory/) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

Learning Outcomes

- Apply fundamental ECE knowledge to a novel concept, synthesize useful techniques from relevant areas, and make discovery that impacts society
- Master and demonstrate effective communication skills in writing, speaking and public presentations
- Involvement in generating journal publications and conference presentations for both active learning and knowledge distribution
- Adhere to the highest standards of professional conduct in research and abide by the IEEE Code Ethics