

# ELECTRICAL ENGINEERING (PHD)

## Doctor of Philosophy in Electrical Engineering

Unit: Speed School of Engineering (<http://engineering.louisville.edu>) (GS)

Department: Electrical and Computer Engineering (<https://engineering.louisville.edu/academics/departments/electrical/>)  
Academic Plan Code(s): EE\_ \_PHD

## Program Information

### General Information

The PhD degree program is intended for persons having an accredited master's and/or baccalaureate degree in electrical engineering. Students interested in the PhD degree program should consult the Director of Graduate Studies in the Department of Electrical and Computer Engineering.

### Degree Requirements

The award of a Doctor of Philosophy degree indicates that a student has attained mastery of a field and has demonstrated the capacity to perform independent scholarly research. Candidates for the Doctor of Philosophy degree must have a minimum final cumulative grade point average of 3.00 for all academic coursework attempted in Graduate Studies.

The requirements for the Doctor of Philosophy degree are explained in more detail in the Degree Requirements section (<https://catalog.louisville.edu/graduate/general-policies-procedures-requirements/degree-requirements/>) of this catalog.

## Admission Standards

The admission standards for the PhD program in electrical engineering are as follows:

- All admission applications for the program shall include:
  - A completed graduate application (<http://louisville.edu/graduate/futurestudents/apply-materials/application/>) for the Graduate School
  - An application fee
  - Results from the Graduate Record Examination (GRE)
  - At least two letters of recommendation
  - Official transcript(s) for all previous post-secondary coursework. All transcripts not in English must be certified as authentic and translated verbatim into English.
- The minimum degree requirement for admission is an accredited baccalaureate degree in electrical engineering or closely related field.
- The successful applicant will typically have an undergraduate grade point average of 3.00 or above (on a 4.00 scale).
- The successful applicant will typically have a GRE combined Verbal and Quantitative Reasoning score of 295 or above.
- International students whose primary language is not English must show English language proficiency by either TOEFL/IELTS/Duolingo score or demonstration of a degree awarded from an acceptable English language institution. The successful applicant will typically have a TOEFL score of 79 or higher or overall IELTS score of 6.5 or higher or a Duolingo score of 105 or higher.

## Program Requirements

Normally, it is expected that the student will complete a master's degree before being admitted to the PhD Program. However, qualified applicants may be admitted directly to the doctoral program after receiving a baccalaureate degree. These students will be required to complete an additional 30 credit hours of coursework at the 500 and 600 level under an individual plan developed in conjunction with the department's Director of Graduate Studies. Also, remedial work may be specified for those applicants who, in the opinion of the faculty, do not have a sufficient background.

The minimum curricular requirements for the doctoral program are:

Code	Title	Hours
<b>Courses - Post Bac</b>		
	Approved Master's Level Course Work	30
	Electives (minimum of 15 credit hours) <sup>1</sup>	15
	ECE 700: Dissertation Research in EE <sup>2</sup>	15
<b>Minimum Total Hours</b>		<b>60</b>

Candidates for the Doctor of Philosophy degree must have a minimum final cumulative grade point average of 3.00 for all academic work attempted in Graduate Studies

<sup>1</sup> Electives can be ECE, non-ECE courses, or non-engineering courses and are approved by the candidates advisor.

<sup>2</sup> Candidates can take fewer than fifteen (15) credit hours of ECE 700 and more elective hours beyond fifteen (15) credit hours, so as not to exceed 30 credit hours total for elective credit hours and ECE 700 credit hours.