ELECTRICAL AND COMPUTER ENGINEERING, PHD

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	51 credits
Minimum Residence Credit Requirement	32 credits
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	1. A grade of B or better in any graduate course is acceptable. A grade of S in E C E 790 Master's Research or Thesis, E C E 890 Pre-Dissertator's Research and E C E 990 Research or Thesis is acceptable. 2. A grade of BC in an E C E course is acceptable, provided the total cumulative GPA for graduate E C E courses is greater than or equal to 3.00. 3. A grade of C or lower in an E C E course is not acceptable. 4. A grade of BC or lower in an independent study course (E C E 699 Advanced Independent Study or E C E 999 Advanced Independent Study) or a grade of U in Research or Thesis (E C E 790, E C E 890 or E C E 990) is not acceptable. 5. A grade of BC or C in a non-E C E course is acceptable only if approved by the Graduate Committee. If students are unable to complete coursework by the end of the term, an instructor may enter a temporary grade of I for incomplete. If students have not resolved all Incompletes by the end of the next fall or spring term in which they are enrolled, they are considered in bad standing by the Graduate School; however, the instructor may impose an earlier deadline. If not resolved within this time period, the grade is considered unsatisfactory and will remain an "I" unless changed to a final grade by the instructor. An unresolved I grade lapses to a grade of PI after five years. Students may be placed on probation or suspended from the Graduate School for failing to complete the work and receive a final grade in a timely fashion. Outstanding Incompletes must be resolved before a degree is granted.
Assessments and Examinations	As soon as a student has passed all the requirements for the PhD degree (except completion of the dissertation), the student is classified as a Dissertator. Specifically, the student must: 1. Pass the Research Readiness Assessment; 2. Receive Advanced Graduate Standing; 3. Complete at least 32 graduate credits at UW-Madison; 4. Satisfy the ECE Course Requirements; 5. Satisfy the Breadth Requirement; 6. Satisfy the English Competency Requirement; 7. Satisfy the E C E Seminar Requirements; 8. Pass the Preliminary Examination.
Language Requirements	Non-native speakers of English who enroll in the PhD program must take the ESLAT test on arrival at the university and then take any recommended courses based on the exam results. In addition, if a student's advisor believes that his or her technical writing ability needs improvement, the student may be required to undertake remedial work.

Graduate School Breadth Requirements	All doctoral students are required to complete a doctoral minor or graduate/professional certificate. Refer to the Graduate School: Breadth Requirement in Doctoral Training policy: https://policy.wisc.edu/library/UW-1200 (https://policy.wisc.edu/library/UW-1200/). Students are expected to consult with their advisors concerning appropriate breadth requirements.

REQUIRED COURSES

Code	Title	Credits
E C E 610	Seminar in Electrical and Computer Engineering	1
E C E 611	Introduction to Doctoral Research in Electrical & Computer Engineering	2
E C E Coursework with the "Grad 50%"attribute [1]		**12**
including at least 9 credits of E C E courses numbered 700 or above		
Additional coursework with advisor approval		**36**
Electrical and Computer Engineering (E C E) courses must be numbered 400 or above. Non-Electrical and Computer Engineering (E C E) courses must be numbered 300 or above.		
Total Credits		**51**

[1] Research, independent study, coop, or seminar credits (e.g., E C E 610, E C E 611, E C E 699, E C E 702, E C E 790, E C E 890, E C E 990, E C E 999, E C E/N E/PHYSICS 922) may not be used to satisfy this requirement.

Electrical and Computer Engineering courses used to satisfy minor requirements may not be used to satisfy this requirement.

Seminar Requirement

All on-campus Electrical and Computer Engineering graduate students must register for E C E 610 Seminar in Electrical and Computer Engineering during their first semester of graduate studies. PhD degree seeking students must take 1 credit of E C E 610 in the fall semester of which they are entering the program and 2 credits of E C E 611 Introduction to Doctoral Research in Electrical & Computer Engineering in the following spring semester. This requirement must be done in the PhD student's first year.

The purpose of E C E 610 is to prepare students for success in graduate school and expose them to areas within Electrical and Computer Engineering as well as related fields outside of Electrical and Computer Engineering, such as biotechnology, physics, computer science, mathematics, or business. Electrical and Computer Engineering is very interdisciplinary in nature, and so it is important for students to be aware of advanced research and development in areas other than their own.

The purpose of E C E 611 is to emphasize research experiences and methodologies to prepare students to pursue PhD research work.