

Electrical and Computer Engineering

Degrees Available at SIUE

- Master of Science in Electrical and Computer Engineering
- PhD in Engineering Science, a cooperative program with SIU Carbondale

Combined Program

- Early Entry BS and MS in Electrical and Computer Engineering

Other Engineering Graduate Programs at SIUE

- Civil Engineering
- Computer Science
- Industrial Engineering
- Mechanical Engineering

Program Format

The program can be completed through a mix of traditional daytime courses and courses offered on evenings/weekends.

Electrical and Computer Engineering at SIUE

For the Master of Science in electrical and computer engineering, the School of Engineering offers courses primarily in the areas of:

- communication systems
- computer systems
- computer vision and image processing
- power and control systems
- IC design
- signal processing

What can I do with a degree in computer and electrical engineering?

Top-rated companies such as Boeing, Anheuser-Busch InBev and many more hire SIUE graduates. Stand out by earning a graduate degree in electrical and computer engineering. By building on an undergraduate foundation and conducting research alongside expert faculty at SIUE, students can enhance their skills in systems analysis and design, engineering design and development, applications design and technical sales, production and manufacturing, or field service and user training. Many faculty members in the Department of Electrical and Computer Engineering are well-respected consultants outside academia, and are excellent professional resources.

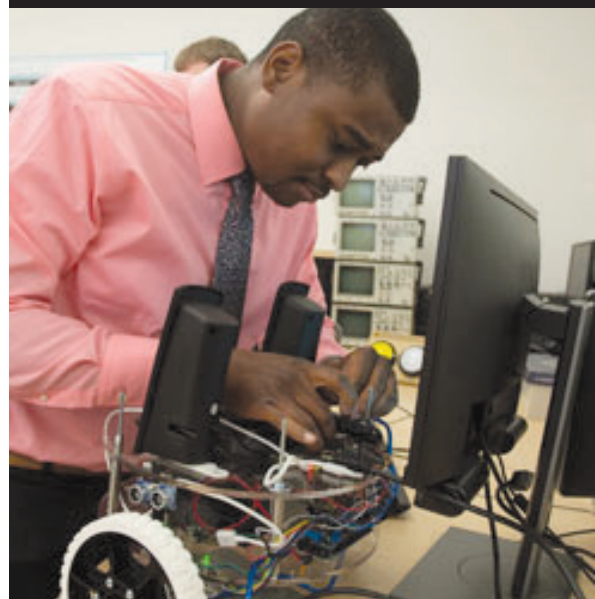
Admission Requirements

- Graduate School application and \$40 fee
- Submission of all postsecondary academic transcripts
- Successful completion of a bachelor's degree prior to enrollment
- Undergraduate GPA of at least 2.75 (A=4.0) in engineering, mathematics, and physical science courses.
- International Applicants
 - It is highly recommended that GRE scores are submitted.
 - Proof of English Proficiency, minimum requirements are TOEFL (79), IELTS (6.5) or equivalent

Program application materials may be uploaded during the application process, but official transcripts must be sent directly from the school attended, and test scores must be verifiable with the appropriate testing service. Please contact the Graduate Admissions office with questions regarding the application submission process at graduateadmissions@siue.edu.

Applicants should normally have a baccalaureate degree in electrical/computer engineering from an ABET-accredited program. Applicants whose undergraduate studies were completed at institutions in countries other than the United States must have a baccalaureate degree in electrical/computer engineering comparable to the United States bachelor's degree.

Applicants with degrees other than a baccalaureate degree in electrical/computer engineering will be considered on an individual basis. Those with baccalaureate degrees in other science and engineering disciplines may be admitted, subject to completion of appropriate undergraduate electrical and computer engineering courses.



Faculty

George L. Engel, DSc

1990, Washington University

Amardeep Kaur, PhD

2014, Missouri University of Science and Technology

Jon D. Klingensmith, PhD

2003, Case Western Reserve University

Robert W. LeAnder, PhD

2003, University of Illinois at Chicago

Andy G. Lozowski, PhD

1999, University of Louisville

Brad Noble, DSc

2000, Washington University

Scott E. Umbaugh, PhD

Graduate Program Director

1990, Missouri University of Science and Technology

Xin Wang, PhD

2011, Marquette University

Yadong Wang, PhD

2010, University of Oklahoma

Tim York, PhD

2014, Washington University

Admission Requirements, Cont.

In exceptional cases, the graduate admissions committee may consider applicants who meet all Graduate School admission standards but who do not meet certain specified program admission requirements. The committee may consider other evidence that indicates high promise of the applicant's success in the program. Such supportive evidence may include extensive professional experience, published research, patents, or outstanding graduate-level work at another institution.

After admission and before enrolling in any courses, students are required to meet with the graduate program director who appoints, in consultation with the student, an advisory committee suited to each student's background and interests. The chair of the advisory committee serves as the student's academic advisor. Students are urged to file an approved plan of study with their academic advisor by the end of the first term of enrollment in the program.

Graduation Requirements

When all other program requirements are satisfied, the advisory committee will schedule an exit oral presentation or examination. The format of the presentation or examination will be determined by the student's advisory committee.

Required Credit Hours/Tuition and Fees

- 33
- Visit siue.edu/graduate-tuition for detailed tuition information

Curriculum

The program of study requires a minimum of 33 semester hours of graduate credit, at least 18 of which must be at the 500-level. Program core requirement specifies at least one course from each of the following two areas:

- Signals and Systems: ECE 532, 535, 539, 563, or 574
- Computer Systems: ECE 538, 577, 581, 582, 584, or 585

In addition, ECE 510 is highly recommended for all graduate students.

Up to six hours may be taken in out-of-department courses. The out-of-department courses can be any graduate-level courses in the School of Engineering, biological sciences, chemistry, environmental sciences, mathematics and statistics, or physics, or be approved by the advisor.

Thesis and non-thesis options of study are available.

Thesis option

The program consists of the core courses, elective courses, and thesis work in the amount of six credit hours. The student will be guided by the advisor with the assistance and concurrence of the advisory committee. Thesis work involves an intensive research effort and generally requires two semesters to complete.

Non-thesis option

The program consists of the core courses, elective courses, and may include a research project. The research project is a component of any 500-level course approved by the advisory committee. The student will be guided by the advisor with the assistance and concurrence of the advisory committee.

Contact Information

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