Industrial Engineering at SIUE
Four areas of concentration are available as part of the industrial engineering program:
• Systems optimization
• Manufacturing engineering design
• Enterprise and production control
• Quality engineering
Core courses are offered in:
• Engineering optimization
• Quality control
• Production planning
• Manufacturing design

Degrees Available at SIUE
• Master of Science in Industrial Engineering
• Master of Science in Integrative Studies - Engineering Management
• PhD in Engineering Science, a cooperative program with SIU Carbondale

Combined Degrees
• Accelerated Combined BS and MS in Industrial Engineering

Program Format
The program can be completed through a mix of traditional daytime courses and online courses.

What can I do with a degree in industrial engineering?
It is imperative to explore graduate education as an avenue to achieve a higher level of career success. Whether students want to move up the ladder, find a niche teaching in higher education or pursue consulting opportunities, they can leverage themselves in a competitive marketplace with a master’s degree in industrial engineering from SIUE.

Companies like The Boeing Co., Emerson Electric, Continental Tire, Ameren and Covidien hire many SIUE graduates. A graduate degree places students in a network of highly skilled and educated professionals who work in the region, across the country and around the world.
Admission Requirements

- Graduate School application and $40 fee
- Submission of all postsecondary academic transcripts
- Undergraduate GPA of at least 2.75 (A=4.0) in engineering, mathematics and physical science courses
- Applicants should have a baccalaureate degree in an engineering discipline from an ABET-accredited program. Applicants who completed a non-ABET-accredited program or whose undergraduate studies were in a country other than the United States must have a baccalaureate degree in an engineering discipline which is comparable to the United States’ bachelor’s degree equivalent, and must take the Graduate Records Examination (GRE) (verbal, quantitative and analytical portions) to support their application.
- Applicants from selected areas of mathematical and physical science will be considered for admission on an individual basis.
- In cases where the applicant has not completed the prerequisites for core or elective courses, the applicant may be required to complete those courses as “not for graduate credit”
- International Applicants: Proof of English Proficiency, minimum requirements are TOEFL (79), IELTS (6.5) or equivalent
- Accelerated Combined Degrees: Current SIUE undergraduate students may apply for the accelerated option to earn graduate-level credit for courses taken their senior year.

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.

In exceptional cases, the graduate admissions committee may consider applicants who meet all of the 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 high scores on the GRE, professional registration, extensive professional experience, professional publications or satisfactory graduate-level work.

Graduation Requirements

After all other program requirements are satisfied, a final examination on the course work and related material on the thesis or project will be given. In the thesis option, the final examination is an oral examination directed primarily at the material in the thesis. This examination is conducted by the advisory committee. In the non-thesis option, the final examination is an oral examination directed primarily at the material in the project and related research paper.

Required Credit Hours/Tuition and Fees

- Thesis Option: 30
- Non-Thesis Option: 33
- Visit siue.edu/graduate-tuition for detailed tuition information

Curriculum

The program offers both thesis and non-thesis options. The thesis option requires 30 credit hours; the non-thesis option requires 33 hours. Of the required 30 credit hours of the thesis option, at least 15 credit hours must be industrial engineering 500-level credit hours, excluding IE 599. At least 21 credit hours must be in industrial engineering courses, and up to six hours may be thesis credit. Of the required 33 hours of non-thesis option, at least 18 credit hours must be industrial engineering 500-level credit hours. At least 24 credit hours must be in industrial engineering courses.

Students who choose the non-thesis option must complete a research project, which has zero credit hour.

The specific program of study is selected by the student in consultation with and approved by the student’s advisor. All students are required to complete the program’s core courses: IE 465-Design and Control of Quality Systems, IE 483-Production Planning and Control, IE 515-Engineering Optimization Models, and IE 576-Advanced Computer Integrated Manufacturing Systems. Students having completed these or similar courses as part of a baccalaureate degree may choose other courses in the same core area with the approval of their advisor.

Four courses of emphasis (systems optimization, manufacturing engineering design, enterprise and production control, and quality engineering) are currently being offered by the program. Students will be guided in thesis work by a thesis advisor with the assistance and concurrence of an advisory committee. The thesis topic will be selected from an area in industrial engineering and approved by the student’s advisor. Writing a thesis involves an intensive research effort and students are encouraged to initiate their thesis work early in the program, even before registering for any thesis credit. Upon the completion of the student’s research, a thesis defense will be conducted. In the non-thesis option, students must complete a research project and the student’s advisor may organize a project presentation during the final semester of study.

siue.edu/grad/industrial-engineering

Contact Information

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This information is concurrent with the 2022-2023 academic catalog. Courses are subject to change at any time.