



**Industrial and systems**  
**engineers make operations**  
**more efficient, manufacturing**  
**more practical, production**  
**more reliable and quality**  
**more consistent.**

GMAT for the dual degree program). Students without U.S. university degrees must submit official TOEFL scores.

**Delayed Admission**

Once admitted, a student's acceptance to the program is valid for one year. Students may enroll at any point during the academic year. If a student wishes to delay admission, an e-mail should be sent to inform the graduate school and the department of the semester the student plans to begin coursework.

**Financial Support**

The department offers financial support to outstanding full-time students, usually in the form of a teaching or research assistantship that includes a monthly salary, a tuition scholarship and a health insurance scholarship. Students are automatically considered for financial support upon acceptance into the program. Positions are generally appointed in spring for the coming scholastic year.

**Contact Information**

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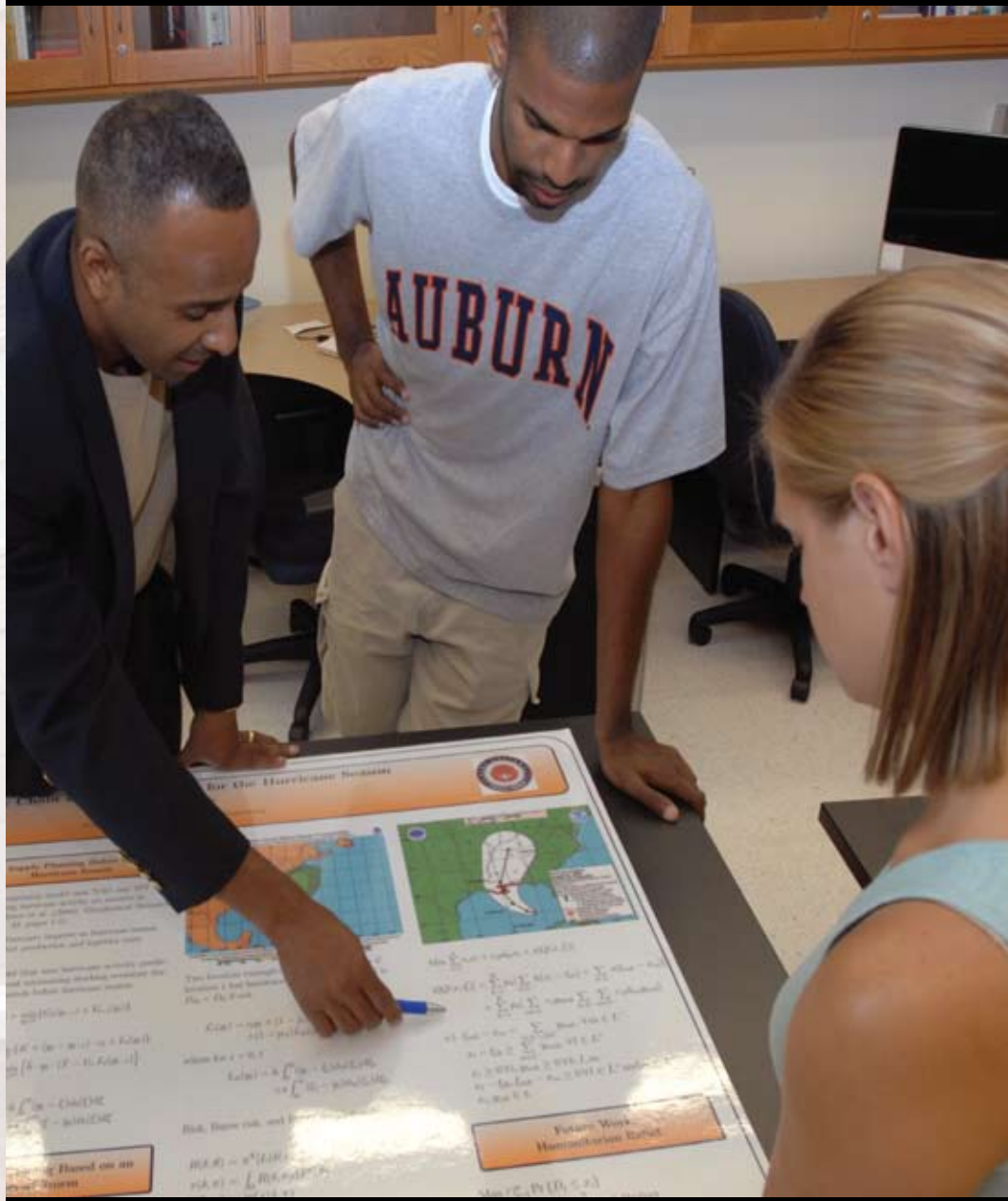
AUBURN UNIVERSITY  
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 COLLEGE OF ENGINEERING

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Auburn University is an equal opportunity educational institution/employer.

**Industrial and Systems**  
**GRADUATE ENGINEERING PROGRAM**



**Auburn University**

## The Department and the University

The Department of Industrial and Systems Engineering (ISE) at Auburn University has been granting degrees since 1931 and has more than 4,000 alumni. Bachelor's degrees, master's of industrial and systems engineering degrees, master's of science degrees and doctoral degrees are offered and accredited at the highest level. The ISE graduate program is ranked within the top 25 percent nationally by *U.S. News and World Report*.

Auburn ISE has approximately 100 graduate students of which half are doctoral students. Recent graduate students have been employed by enterprises such as Intel, Accenture, Southern Company, Harris, Delta Airlines, Siemens, Honda and NASA, and by universities such as Penn State, University of Wisconsin, University of Louisville and Old Dominion.

Auburn University is recognized as a leading land grant institution with emphasis in engineering, business and agriculture curriculums. Located in east Alabama, Auburn is a college community less than two hours southwest of Atlanta. Auburn has a safe and affordable living environment with plentiful options for student housing, a free shuttle system for transportation throughout the university and the town, an excellent medical center and superior public schools.

## Scholarly Environment

The foundation of Auburn ISE is its faculty. Graduate class size, ranging from 10 to 40 students per class, contributes greatly to close student-faculty interaction.

ISE faculty are leaders in their fields – three are recognized as IIE Fellows, two have been editors-in-chief of flagship journals and four have authored well-known books, and all faculty members participate in engineering research. The department conducts research projects sponsored by a variety of government agencies and

private industries, including the National Science Foundation, National Institute for Occupational Safety and Health, Office of Naval Research, NASA, U.S. Department of Agriculture and Siemens. All ISE professors hold doctoral degrees and several are registered professional engineers.

## Facilities

The department is housed in the Shelby Center for Engineering Technology, a complex that promotes a superior education and research experience while facilitating collaboration among faculty and students. State-of-the-art laboratories in computational systems; energy economics; automotive manufacturing systems; logistics; manufacturing processes and metrology; occupational ergonomics and safety; human factors; biomechanics; and work measurement are available and

easily accessible to students. Spacious, well-equipped offices, meeting rooms, libraries, graduate student lounges, classrooms and computing labs are available to all ISE graduate students.

## Academic Program

Three graduate degrees are offered by Auburn's ISE program – the master's of industrial and systems engineering (MISE) degree, the master's of science degree and the doctoral degree. The MISE is a 30 credit hour, nonthesis program, while the master of science degree is 30 credit hours as well, and includes a six-hour thesis. There is also a dual MBA/MISE program. It is not necessary for a student to have a master's degree to enter the ISE doctoral degree program.

All ISE graduate degrees require completion of five core courses, including the following three courses:

- INSY 6600 Manufacturing/Production Economics
- INSY 7300 Advanced Engineering Statistics I
- INSY 7420 Linear Programming and Network Flows

Plus two of the following courses:

- INSY 6010 Safety Engineering I or INSY 7060 Ergonomics I
- INSY 7030 Manufacturing Systems
- INSY 7240 Production and Inventory Control
- INSY 7400 Simulation

Along with core classes, students choose from a wide variety of elective courses, including Six Sigma quality control, lean manufacturing, project management, real options and decision analysis, integer and non-linear programming, supply chain management, electronics manufacturing, adaptive optimization and human factors engineering.

## Dual MBA/ MISE Program

This program allows students to obtain both an MISE degree and an MBA degree from Auburn University in less than two years. The intervening summer is spent either as an industrial intern or on an international experience. Students must be admitted to both the MBA and MISE degree programs to participate in the dual program and may take either the GRE or GMAT exams. Outreach students may participate in this dual degree program, though the time frame may exceed two academic years.

## NIOSH Center for OSE Graduate Education

The department houses a National Institute for Occupational Safety and Health (NIOSH) supported center for occupational safety and ergonomics (OSE) education.



The center offers unique possibilities for the graduate student interested in the areas of ergonomics, human factors, biomechanics, safety and industrial hygiene. The center participates in all three graduate degrees offered by the department and offers extra activities in the form of plant visits, research projects, joint seminars with University of Alabama at Birmingham and special courses by experts external to the department. For full-time students who are U.S. citizens or permanent residents, NIOSH fellowships that pay tuition and a stipend are available for both master's and doctoral students. They are awarded each year based on background and interest.

## Outreach Program

Auburn ISE currently includes enrolled off-campus graduate students located across the globe, from Iraq to Alaska. Many are working professionals who travel frequently or do not have access to a superior engineering graduate program nearby, while some are serving in the U.S. armed forces. Live courses are videotaped and made available to off-campus students via streaming video on the Internet or DVD. Available courses and degree programs are identical to those offered to on-campus students.

## Admissions

### Educational Background

ISE graduate students are required to hold a bachelor's degree or its equivalent from an accredited college or university. An engineering background is not required and students with undergraduate degrees in mathematics, the sciences and business have successfully completed Auburn ISE graduate degrees. The core courses which all ISE graduate students must complete assume certain background requirements, including:

- Math through differential equations (four terms)
- Calculus-based probability and statistics (two terms)
- Deterministic and stochastic operations research (one term)
- Engineering economics (one term)

### Admissions Process

Admission to the ISE graduate program occurs on a rolling basis. Applications to the Graduate School can be completed online.

### Requirements

There are no set requirements for admission – GPA, previous degrees, standardized test scores, background and interests are all considered. U.S. citizens or permanent residents can be admitted provisionally without GRE or GMAT scores. All students must submit official transcripts and GRE scores (or

