Industrial and Systems Engineering — Graduate Certificate, MISE, MISE/MBA, MS, MEM, PhD

Degree Programs:

• Industrial and Systems Engineering — MISE (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/industrialssystemengr_mise/)
• Industrial and Systems Engineering — MS (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/industrialssystemengr_ms/)
• Engineering Management — MEM (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/mastersofengineeringmanagement/)
• Industrial and Systems Engineering — PhD (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/industrialssystemengr_phd/)

Graduate Certificates:

• Automotive Manufacturing Systems (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/automotivemfgsystems_certificate/)
• Occupational Safety & Ergonomics (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/occupationalsafetyergon_certificate/)
• Modeling and Data Analytics for Operations (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/modelingdataanalytics_certificate/)

The department offers the master of industrial and systems engineering, a master of science, a master of engineering management with four options, a joint program leading to both MISE and MBA degrees, and the doctor of philosophy. These programs are for students with undergraduate degrees in industrial engineering, other engineering disciplines, mathematics and sciences.

All masters applicants who have an engineering degree from an ABET-accredited program with a GPA of 2.75 or higher do not have to take the GRE. Otherwise, applicants must submit Graduate Record Examination scores for the General Test except MISE/MBA applicants who may instead submit Graduate Management Admission Test scores. All PhD applicants are required to take the GRE.

Both the MISE and MS programs require a total of 31 hours of course work, which includes a one semester hour seminar class. The MISE is oriented toward professional practice. MISE students must take 9 semester hours of core courses, 12 hours of INSY electives and 9 hours of INSY-related electives. The MS has the same course requirements and hours except that 4-6 hours of thesis may be substituted for the same hours of elective courses.

The MEM program requires 30 hours of course work. There are four options: Manufacturing, Systems, Occupational Safety and Ergonomics, and Product Innovation.

The MISE/MBA program is a 55-hour program administered jointly by ISE and the MBA program. The program saves the student six hours of course work over completing both degrees separately. For the MISE portion of the dual degree, the program consists of 9 semester hours of core courses, 12 hours of INSY electives and 6 hours of INSY-related electives. One semester hour of INSY graduate seminar is also required. For the MBA portion of the dual degree, there are seven core (BUSI) classes for 21 semester hours and an additional 2 classes of BUSI or related electives for six hours. For the MBA, students without two years full time work experience are required to do a 3-credit hour internship in place of one of the 3-hour BUSI or related electives. Students must apply separately to each program (MISE and MBA), but only have to pay one application fee.

Research involvement is the dominant element in the doctoral program. It provides a quality educational experience for selected individuals whose records indicate excellent potential not only for superior performance in course work, but also for the research and ensuing dissertation which is an original and scholarly contribution to the field. The PhD program requires at least 60 semester hours of coursework beyond the bachelors, including 9 semester hours of core courses. A minimum of one hour of graduate seminar is also required. The student must demonstrate a high level of proficiency in a specific area of industrial and systems engineering as well as a competence in the entire field. A minimum of 10 hours in Research and Dissertation credit is required.