

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

Degree Programs:

- 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/occupationalafetyerogon_certificate/)
- Manufacturing Systems (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/manufacturingsystems_certificate/)
- Modeling and Data Analytics for Operations (http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/industrialandsystemsengineeringmisemisembamsphd_major/modelingdataanalytics_certificate/)

The department offers the master of science (thesis and non-thesis), a master of engineering management with four options, a joint program leading to both MS 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 MS/MBA applicants who may instead submit Graduate Management Admission Test scores. All PhD applicants are required to take the GRE.

The MS programs require a total of 31 hours of course work, which includes a one semester hour seminar class. The MS non-thesis is oriented toward professional practice. These students must take 9 semester hours of core courses, 12 hours of INSY electives and 9 hours of INSY or INSY-related electives. The MS thesis 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 MBA/MS in Industrial & Systems Engineering is a 55-credit hour concurrent degree program administered jointly by the Industrial and Systems Engineering faculty and the MBA program. Students must apply separately to each program (MS Industrial & Systems Engineering and MBA). The concurrent degree path consists of 27 credit hours of MBA core (BUSI) classes, 9 credit hours of INSY core classes, 12 credit hours of INSY electives, a one credit hour INSY seminar course and 6 hours of approved electives. The program saves the student fifteen hours of coursework over completing both degrees separately.

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. An additional 12 hours of INSY electives must be taken as well as an additional 9 hours of INSY or INSY-related electives. 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.