# BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

The principal strength of the academic program leading to the Bachelor of Science in Industrial Engineering (BS IE) is its blend of mathematics, physical sciences and business applications. The methodology foundation is built on probability, optimization, statistics, computing, and economics. The program features a unique concentration system that allows students to get a broad industrial engineering education and to specialize in areas such as

- · Advanced Studies in Operations Research and Statistics,
- · Analytics and Data Science,
- · Economic and Financial Systems,
- · Operations Research,
- · Quality and Statistics,
- · Supply Chain Engineering, and
- · General Industrial Engineering.

This blend produces the flexibility that is inherent in the field of industrial and systems engineering, and that affords BSIE graduates a wide array of career options. Our graduates are constantly looking for ways to make anything in life work better, more efficiently and more productively.

#### **Program Educational Objectives**

The H. Milton Stewart School of Industrial and Systems Engineering expects our graduates (in 3 to 6 years):

- · to become successful Industrial Engineers;
- · to take leadership in their endeavors;
- · to be self-learners and starters;
- · to succeed in professional and educational advancement
- Bachelor of Science in Industrial Engineering Advanced Studies in Operations Research and Statistics
- Bachelor of Science in Industrial Engineering Analytics and Data Science
- · Bachelor of Science in Industrial Engineering General
- Bachelor of Science in Industrial Engineering Economic and Financial Systems
- Bachelor of Science in Industrial Engineering Operations Research
- · Bachelor of Science in Industrial Engineering Quality and Statistics
- Bachelor of Science in Industrial Engineering Supply Chain Engineering

## **Cooperative Plan**

The Co-op Program enhances the student's education, employability and earnings potential. For more details, visit co-op pages from Georgia Tech's co-op Website.

 Co-op courses are designated in the schedule of classes as coop. All students interested in registering for this course(s) must have been accepted into the co-op Program. Students must have met with their co-op advisor to be issued a permit to register for restricted course(s). Students must register for the co-op course every semester they are at work in order to receive credit for the work term.

- Students who are in the Co-op Program (U.S. citizens and Permanent Residents) and are returning to work should automatically receive a permit but are advised to remain in close contact with their co-op advisor.
- International students must receive work authorization from the Office of International Education prior to each work term before a course registration permit will be issued.
- Neither co-op nor internship courses count for credit towards the industrial engineering degree; however, successful completion of the Co-op Program leads to a degree designator.

For more information about all of the programs in the Center for Career Discovery and Development, visit Center for Career Discovery and Development.

### **International Plan**

The Georgia Tech International Plan is designed to prepare graduates to develop significant global competence. Many Industrial Engineers work in consulting companies, supply chain, economic decision systems, etc. Global perspectives are very important. The significant global competence will give them an additional advantage on the job market and on the jobs.

The major components of International Plan include

- Twenty six weeks of international experience (work, research or study)
- Foreign language requirements. This can be satisfied by oral
  proficiency measured tested by an exam by the American Council for
  the Teaching of Foreign Languages (ACTFL). The foreign language
  requirement can also be satisfied by course work. It means the
  passing of two 2XXX level language classes.
- 3. Three internationally oriented courses plus an addendum in the capstone design on international perspective.

For more details of the International Plan, including application materials, visit the Office of International Education. Please also see The International Plan Option in ISyE.

## **BS/MS Options**

The School of Industrial and Systems Engineering offers the following options for eligible students to double count a maximum of 6 credit hours toward an undergraduate degree and graduate degree:

BS in Industrial Engineering/MS in Supply Chain Engineering - contact School of more information

BS in Industrial Engineering/MS in Industrial Engineering

BS in Industrial Engineering/MS in Health Systems

BS in Industrial Engineering/MS in Operations Research

#### **BSMS Option**

## Undergraduate College of Engineering and Computer Science majors and Master of Science with a major in Management

This option is open to all undergraduate College of Engineering and Computer Science students. Students must submit a BSMS application meet admissions criteria to be considered for the option.

Students may double count up to 6 credit hours of letter-grade 4000-level College of Engineering (if COE major) or Computer Science (if CS major) courses towards electives in the Master of Science with a major

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in Management (MS-MGT) program. Course selection for double-counted 4000-level courses must be approved by the MS-MGT program advisor. Students must still complete the 12 credit hour MS-MGT core.

Students are encouraged to reach out to the Scheller College of Business for more information.