Industrial Engineering is concerned with the design, improvement, and installation of integrated systems of people, material, information, equipment, and energy. It draws upon specialized knowledge and skills in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design to specify, predict, and evaluate the results to be obtained from such systems. Industrial engineers are utilized in a number of sectors including manufacturing, healthcare, energy, consulting, finance, technical sales, supply chain, logistics and more.

2020 UNDERGRADUATE ENROLLMENT: 534
APPROX. TOTAL CREDIT HOURS*: 127
*Dependent on emphasis

INDUSTRIAL ENGINEERING AT CLEMSON
The Department of Industrial Engineering at Clemson offers foundational coursework in all major areas of industrial engineering, including probability and statistics, operations research, production systems, human factors and ergonomics, supply chain management, logistics and others. We offer a Six-Sigma Quality Certification as an elective option with no additional charge, as well as a Sales Engineering certificate.

clemson.edu/ie
PROGRAM DETAILS:

Industrial engineers use their skills to design, model and analyze real-world systems, such as waiting lines in amusement parks or airport security checkpoints at large airports. They turn complicated decision problems into mathematical models that can be solved to provide managerial insights that improve processes.

The Clemson IE program also offers a bachelor’s (BS) to master’s (MS) program that counts some graduate classes towards both the BS and MS degree, allowing students to earn their MS degree in only one additional year. The BS program culminates with a senior design project in which students work with real, local firms to address actual problems faced by those companies every day.

LABS AND FACILITIES FOR HANDS-ON TRAINING

Clemson IE enjoys a new addition to its main academic building, Freeman Hall, that houses all of our faculty, staff, and academic advisors in a single location for easy access. Freeman Hall accommodates students with many study areas, a student conference room and a large student lounge.

CLUBS AND ORGANIZATIONS

The primary professional society for industrial engineers is the Institute of Industrial and Systems Engineers (IISIE). Two other major societies for the field include the Institute for Operations Research and the Management Sciences (INFORMS) and the Human Factors and Ergonomics Society (HFES). The academic honor society for industrial engineers is known as Alpha Pi Mu (APM). Other related organizations include:

- Society of Sales Engineers
- Consulting Club
- Society and Health Systems (SHS)
- Society for Manufacturing Engineers (SME).

GLOBAL ENGAGEMENT

Most of our students who choose to study abroad do so in the summer; however, overall 7% of our students study abroad over the course of the academic year. Clemson IE actively engages international institutions that offer Clemson equivalent courses, so that students can gain a global engineering experience that many employers value today.

GRADUATE AND PROFESSIONAL SCHOOL OPPORTUNITIES

The majority of our undergraduate students enter the workforce immediately following graduation. However, others enroll in graduate programs in industrial and systems engineering, pursue an MBA, or enroll in law school.

UNDERGRADUATE RESEARCH

A popular option for undergraduate research experience is through creative inquiries. This is a class in which students work with faculty members on research projects. Some previous and current projects include:

- Human Performance Engineering
- Developing Applications in Sports, Health and Human Machine Interface
- Clemson University Bicycle Sharing System Modeling
- Focusing on Disabilities: Adaptive Multimodal Interfaces to Support People with Disabilities in the Workplace

CO-OPS AND INTERNSHIPS

Companies who partner with Clemson IE to offer co-op and internship opportunities include:

- BMW
- General Electric
- Honda
- Michelin
- Disney
- UPS

EMPLOYERS

According to data from Clemson’s Center for Career and Professional Development, 100% of the 2017-2018 IE graduates that responded to the survey have full-time employment. Employers include:

- Accenture
- Boeing
- Bosch
- Citi Bank
- Lockheed Martin
- Siemens

More info at: clemson.edu/cecas/psu