



INDUSTRIAL ENGINEERING

Industrial engineers are engineers with a business flair who enjoy working with people. They are concerned with the design, analysis, operation and improvement of integrated systems that produce and/or supply products and/or services in an effective, efficient, sustainable and socially responsible manner. With such a broad skill set and the ability to improve any type of system, industrial engineers work in almost every industry that exists in the world today.

What Do Industrial Engineers Do?

Industrial engineers apply engineering design to creating and improving systems that deliver products or services. They strive to improve the productivity of their organizations and respond to changing customer needs and wants quickly and constantly. For instance, an industrial engineer may be involved in designing a new production plant for a car manufacturer (a product) or in designing an effective emergency room for a hospital (a service). In designing these systems, an industrial engineer integrates equipment, materials, energy, information, and people together to meet business objectives while ensuring

product/service quality and reliability, the safety and satisfaction of customers and employees, and the effective and productive use of resources.

The versatility of industrial engineers allows them to engage in activities that are useful to a variety of businesses, governments, and nonprofits. For example, industrial engineers engage in supply chain management to help businesses minimize inventory costs, conduct quality assurance activities to help businesses keep their customer bases satisfied, and work in the growing field of project management as industries across the economy seek to control costs and maximize efficiencies.

PROGRAM FACTS

2020–2021 Enrollment: 205 Students

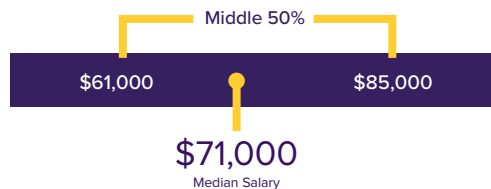
Minors: Many IE students pursue minors such as business administration, technical sales, or e-commerce engineering. Students can use the tech elective slots to pursue these minors.

Experiential Learning: More than 90% of students complete at least one co-op or internship before graduating

Student Organizations: IISE—Institute of Industrial and Systems Engineers; Alpha Pi Mu Honors Society

GRADUATE STARTING SALARIES

Median full-time in field salary info for graduates of the last three years



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3/2 Program and Certificates

3/2 Joint BSIE/MBA Program: An alternative option available to students is continuing their education through graduate school. Our 3/2 program provides highly capable industrial engineering students an option to complete both a BSIE and MBA at LSU in five years. Normally, this would take six or more years to complete.

Certificates: Healthcare Engineering (extra one-hour seminar, plus an internship required), OSHA 10-Hours Safety (IE 4462 required)

Industrial Engineering CURRICULUM OVERVIEW

YEAR 1	YEAR 2	YEAR 3	YEAR 4
Industrial ENGR Fundamentals	Engineering Statistics	Supply Chain Logistics I	Lean Manufacturing Systems
Methods and Systems ENGR	Introduction to the Use of Computer	Supply Chain Logistics II	Senior Design I
Physics I: Particle Mechanics	Information Technology Project Management	Advanced ENGR Statistics	Senior Design II
Intro Physics Lab	Comprehensive Electrical ENGR	Information Systems ENGR	Plant and Systems Design
General Chemistry I	Statics	Quality Control and Six Sigma	Tech Elective
Calculus I	Materials of ENGR	Principles of ENGR Economy	Tech Elective
Calculus II	Physics II: Fluids Thermodynamics, Waves, and Modern Physics	Human Factors ENGR	Tech Elective
General Ed: English Comp I	Elementary Differential Equations and Linear Algebra	Manufacturing Processes and Methods	General Ed: Arts
Fundamentals of Communication or Public Speaking	Economic Principles	Mechanics of Materials (Strengths)	General Ed: Social Sciences
	General Ed: Life Science	General Ed: English Comp II	General Ed: Humanities
			General Ed: Humanities

LEGEND

Major-specific Engineering
Other Engineering
Science
Math
General Education