Minor in Industrial Engineering

About This Program

The minor in Industrial Engineering provides students with the knowledge, skills, and experience related to several core areas of IE including: engineering economics, engineering probability and operations research. The elective choices reflect the diverse nature of the discipline including choices in data analytics, human systems design, automation systems design, project management, systems engineering, mathematical modeling, and decision making. This minor is accessible to all students with a mathematics background through Calculus III and provides a knowledge base and skill set that pairs well with a wide variety of college degrees.

Competencies

- 1. Upon completion, students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2. Upon completion, students will be able to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 3. Upon completion, students will be able to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 4. Upon completion, students will be able to acquire and apply new knowledge as needed, using appropriate learning strategies.

Curriculum

| Total Hours | | 18 |
|--|-------------------------|----|
| Three 3000/4000-level IE courses for which the prerequisites are satisfied | | 9 |
| IE 3315 | OPERATIONS RESEARCH I | 3 |
| IE 3301 | ENGINEERING PROBABILITY | 3 |
| IE 2308 | ECONOMICS FOR ENGINEERS | 3 |

To receive the Minor in Industrial Engineering, all courses must be completed with a grade of C or better.

Advising Resources

Location:

325 Woolf Hall

Email:

IEUGAdvising@uta.edu

Phone:

817-272-3092

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Undergraduate Advising Information