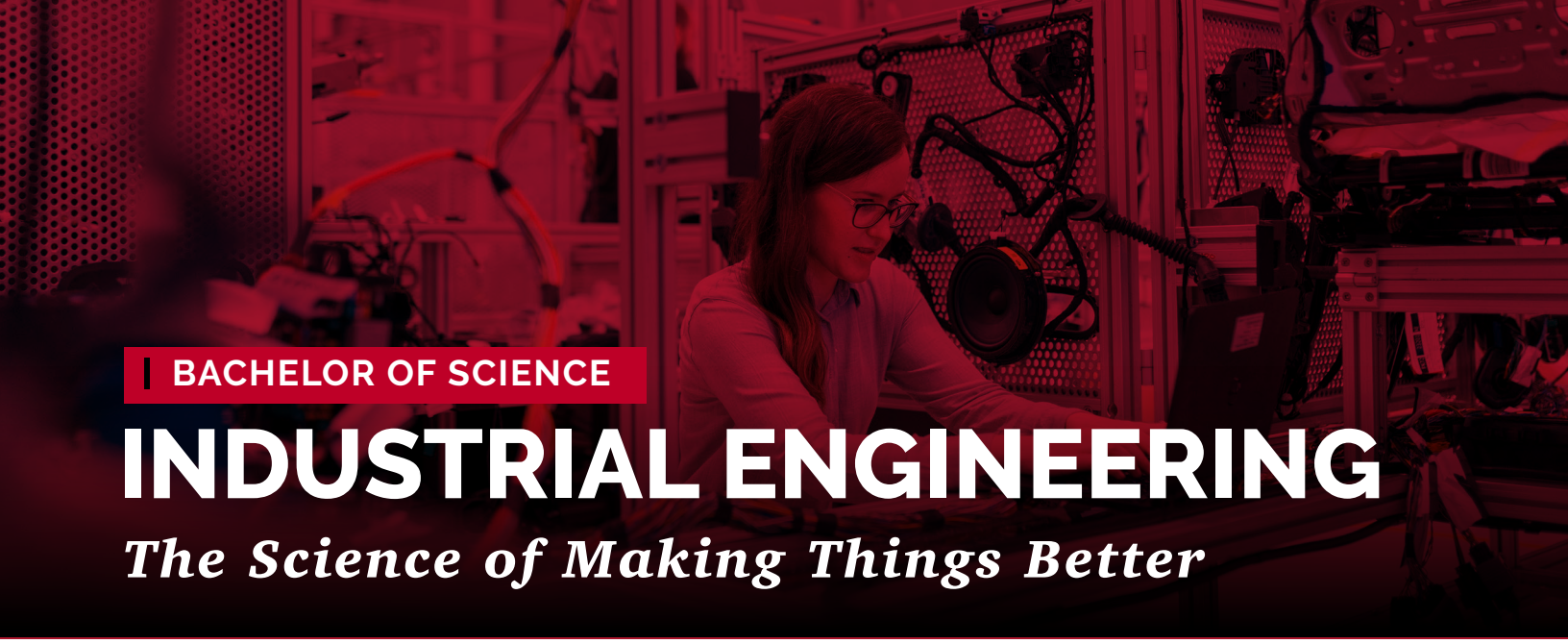


BACHELOR OF SCIENCE

INDUSTRIAL ENGINEERING

The Science of Making Things Better

INDUSTRIAL ENGINEERS DESIGN BETTER WAYS OF DOING THINGS.

They build systems like the one that manufactures your smartphone, or the one that lets you shop on your computer screen and brings products to your door. In Texas Tech's bachelor's program in Industrial Engineering, you study manufacturing and logistical systems, how to set quality standards, and how to optimize interactions between humans and machines. You prepare for a career dedicated to finding creative solutions that make systems work.

INDUSTRIAL ENGINEERS BECOME EXPERTS IN

MANUFACTURING. They build and improve all aspects of manufacturing processes to make them more efficient, safe, and sustainable.

SYSTEMS AND ENGINEERING MANAGEMENT. They use advanced management tools to plan and execute complex technical projects, improving strategy, decision-making, and the financial bottom line.

OPERATIONS RESEARCH AND DATA SCIENCE. They use big data sets and statistical models to improve complex systems like health care delivery and the global supply chain.

HUMAN SYSTEMS. They improve relations among human beings within systems, aligning them with human biology and psychology.

TOP TIER RESEARCH INSTITUTION

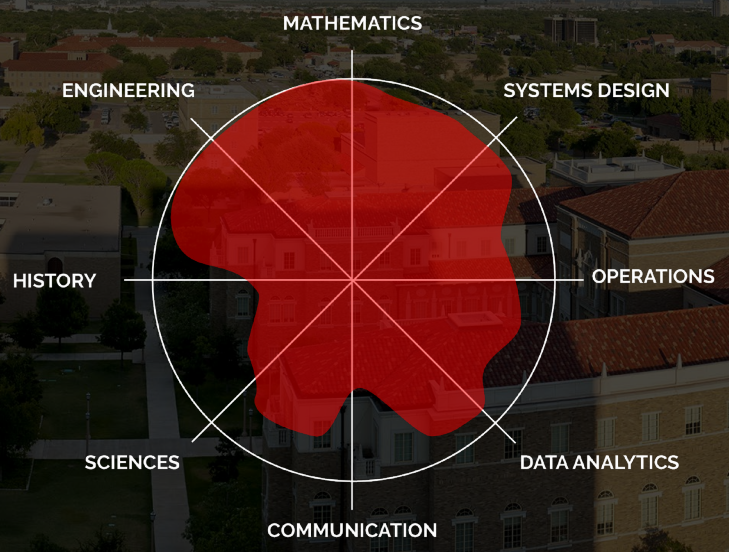
LEARNING ENVIRONMENT • 100% ENGLISH INSTRUCTION •

10:1 STUDENT TO PROFESSOR RATIO

depts.ttu.edu/costarica/industrialengineering.php

DESIGN AND BUILD TOMORROW'S TECHNOLOGIES

The Texas Tech industrial engineering program immerses you in the disciplines, knowledge networks, and technologies you need to launch your global career. As a student in Texas Tech's Whitacre College of Engineering, you have access to world-class faculty and industry leaders that are shaping tomorrow. In our state-of-the-art classrooms and laboratories at Avenida Escazú, you are mentored by Ph.D.-qualified faculty who have a special commitment to helping you, as an individual, to master the knowledge you need in order to be globally competitive and succeed.



HANDS-ON EDUCATION FOR JOBS OF THE FUTURE

Texas Tech's Industrial Engineering B.S. provides a broad-based understanding of industrial engineering as a discipline and as a profession. In addition to developing your technical hard skills, the Texas Tech-Costa Rica experience prepares you with the soft skills that will help you stand out and lead.

First-Year Experience

As a first-year student, you explore the relationship between industrial engineering and the other engineering disciplines. In addition to classes in English, math, chemistry, and physics, you will take courses that introduce you to trends currently shaping all engineering fields:

- **bio-inspired design**
- **data science**
- **engineering and society**

The first-year seminar clarifies the differences among engineering disciplines, helping you experience how industrial engineers work as part of larger creative teams.

Senior Project: Solve an Industry Problem

As a senior student, you tackle an individual capstone project in cooperation with an industry partner. You work with a sponsoring organization and a faculty mentor to solve a manufacturing or service problem. You present the solution to the company sponsor and a group of IE students and alumni. You showcase your professionalism, systems thinking, ethics, and proficient communication.

The senior project gives you the chance to apply technical knowledge and to solve real problems. At the same time, you cultivate the leadership and communication skills that make you highly employable in the globally competitive job market. You emerge as a confident, competent engineer with valuable industry contacts and a track record of success.

TEXAS TECH UNIVERSITY
Costa Rica™

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