

# EMERGENCY CENTER

M.S. AND PH.D. IN

# INDUSTRIAL ENGINEERING

IE.UH.EDU

*OPTIMIZING GLOBAL LOGISTICS, SYSTEMS AND PROCESSES*

## INDUSTRIAL ENGINEERING AT THE UNIVERSITY OF HOUSTON

Industrial engineers are optimization experts, focusing on the effective use of people, machines, materials, information and energy to improve processes for products and services. This unique engineering field includes the development of analytical methods and techniques that concentrate on higher productivity and better quality. Firms looking to develop more efficient processes hire industrial engineers to reduce costs and waste while increasing safety and efficiency.

The industrial engineering department at the UH Cullen College of Engineering is highly-ranked, consisting of top-performing students and world-class faculty and researchers. Industrial engineering graduate students are taught by professors who are actively conducting research in the areas of healthcare and medical decisionmaking, homeland and port security, energy, reliability and maintenance, logistics and transportation, supply chains and manufacturing. Graduate students are exposed to professional and research opportunities throughout their education.



Cullen College of Engineering  
UNIVERSITY OF HOUSTON



## FACULTY EXPERTISE & RESEARCH ENTERPRISE

Our aim is making better decisions with information technologies and data analytics, designing more efficient systems that are secure and resilient, ensuring supply chains that operate even in challenging environments, and supporting service grids that meet the needs of our society.

Our award-winning faculty are constantly performing cutting-edge research, and are always seeking hard-working graduate researchers to join them in their labs. Available research areas in the Industrial Engineering Department include healthcare and medical decision making, community resilience and homeland security, energy and power systems, reliability and maintenance, logistics, transportation and supply chain, advanced manufacturing, and data analytics.

To view a full list of faculty by research area, please visit: [www.ie.uh.edu/research/faculty-expertise](http://www.ie.uh.edu/research/faculty-expertise)

## GRADUATE DEGREE OFFERINGS

The UH Cullen College of Engineering offers a Master's degree in IE (MIE), Master of Science (MSIE) degree and a Ph.D. degree. The following special programs are also available to industrial engineering graduate students:

- **MIE/MBA concurrent degree:** The UH Cullen College of Engineering and the C. T. Bauer College of Business at the University of Houston offer a concurrent degree program.
- **MIE with concentration in public safety management:** This concentration provides a solid education for understanding and tackling interdisciplinary issues at the intersection of public safety management and industrial engineering.
- **Master's in Engineering Management:** This degree bridges the gap between engineering and technological problem-solving abilities of engineers with administrative skills for leading the day-to-day operations of modern complex organizations.



## FACILITIES & LABORATORIES

Located in Engineering Buildings 1 and 2, our faculty have built state-of-the-art research laboratories for advanced and additive manufacturing, system design, and information technologies. Some of our noteworthy labs include:

- Design & Free Form Fabrication Laboratory
- Ergonomics / Safety Laboratory
- Industrial Engineering Computer Laboratory
- SHINES Lab
- Systems Optimization & Computing Laboratory (SOCL)

Learn more at: [www.ie.uh.edu/research/research-labs](http://www.ie.uh.edu/research/research-labs)

## CENTERS & CONSORTIA

Our collaborations are local, national and global. You will find our faculty working with researchers from the Texas Medical Center, Harris County, Homeland Security, the Port of Houston and many others. We have launched and are part of centers and consortia at UH and beyond. Examples of research centers include:

- Borders, Trade, and Immigration Institute (BTI)
- E2MAP for Resilient Community Building under Natural and Man-made Disasters

## FOR MORE INFORMATION

For more information on eligibility and admissions requirements, please visit [www.ie.uh.edu/graduate-program/overview](http://www.ie.uh.edu/graduate-program/overview)