# INDUSTRIAL RELATIONS

UNIVERSITY of HOUSTON ENGINEERING

# A PARTNER IN INNOVATION, RESEARCH, AND WORKFORCE DEVELOPMENT



#### LOOKING TO INNOVATE OR ADDRESS KEY CHALLENGES?

OUR DISTINGUISHED FACULTY, SOME OF WHOM ARE MEMBERS OF THE NATIONAL

ACADEMY OF ENGINEERS AND THE NATIONAL ACADEMY OF INVENTORS,

#### ARE RENOWNED IN THE BROAD CATEGORIES OF:



**BIOENGINEERING:** Designing, analyzing, and developing novel biological systems, processes, devices, and technologies for prevention and treatment of disease.

**BIOMEDICAL:** Developing innovative and impactful diagnostics, therapies, life sciences and medical technologies to improve healthcare and healthcare delivery systems.



**COMPLEX SYSTEMS:** Understanding complexity in systems and the collective behavior of their parts to stimulate revolutionary breakthroughs.



**COMPUTING:** Developing innovative computer hardware and software, computable processes, programming, machine learning, artificial intelligence, data analytics, visualization, information systems and technologies.



**EDUCATION:** Researching teaching knowledge and principles of engineering and attracting student to Science, Technology, Engineering and Mathematics and assuring student success, retention, and graduation.



**ENERGY:** Developing innovative energy systems and services to increase efficiency and sustainability of conventional, unconventional, and renewable energy technologies.



**ENVIRONMENT:** Developing innovative and protective means to address climate change, improve environmental quality, mitigate natural hazards and create sustainable and resilient natural and human-designed systems.



**INFRASTRUCTURE:** Developing sustainable, efficient, environment-friendly, and reliable building blocks of society for transportation, urbanization, telecommunication, recreation, and energy.



**MANUFACTURING:** Fabricating, processing, preparing, and automating the assembly and development of novel products from raw materials to increase industrial productivity and cost-efficiency.



**MATERIALS:** Creating, designing, improving, and discovering novel materials for better solutions to technological, societal, and environmental problems. Advancing biomaterials, ceramics, electronic materials, metals, and polymers affecting many engineering fields and industries.



**POWER:** Generating, transmitting, distributing, and utilizing electric power for the benefit of society while improving efficiency, resiliency and sustainability of power systems and power grids.



**SENSORS:** Developing devices for detecting, measuring, recording, and responding to physical stimuli to improve the operation, reliability, serviceability, and utility of natural and engineered systems.

# WORKING TOGETHER TO FIND THE RIGHT SOLUTIONS THAT MEET YOUR NEEDS

Are you seeking a partner in innovation, entrepreneurship or research? Are you looking to develop your workforce? Partnering with the Cullen College of Engineering will give your company access to innovative, renowned research faculty across a broad spectrum of research frontiers. You will be able to take advantage of continuing education courses and certificate programs, and reach a large cohort of highly motivated and bright students at all of our research and academic facilities across multiple buildings on the main campus, the UH at Katy instructional site, and at the University of Houston-Technology Bridge. We invite you to engage with our College and develop a long-lasting partnership in engineering excellence!

**ENGINEERING** EXCELLENCE SINCE 1941



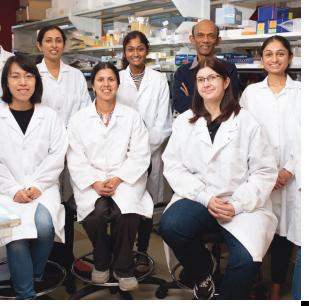
### **RESEARCH FACILITIES & CAMPUSES**

Besides being advantageously located in the heart of the oil and gas industry and near the largest medical center in the world in Houston, TX, the Technology Bridge campus is also home to some of the finest research laboratories, research centers and institutes, and industry consortia.

The Katy campus located in Houston's Energy Corridor features state-of-the-art labs and studios and offers undergraduate, graduate and certificate programs for students and professionals.

WITH RESEARCH EXPENDITURES TOPPING \$34 MILLION AND INCREASING EACH YEAR, THE COLLEGE CONTINUES TO FOLLOW THE TRADITION OF EXCELLENCE IN SPEARHEADING RESEARCH THAT HAS A REAL DIRECT IMPACT IN THE HOUSTON REGION AND BEYOND.





### ENGAGE WITH OUR COLLEGE

- Participate in any of our research centers and consortia
- Become a corporate affiliate
- Sponsor or name a lab, facility, program or department
- Be a lifelong learner in our academies, certificate programs, and online learning
- Sponsor a research project with faculty
- Endow a professorship

### **ENGAGE WITH OUR STUDENTS**

- Support a student intern or a co-op
- Recruit your workforce
- Support a design challenge, project or competition
- Mentor a startup
- Partner with a student organization
- Sponsor a workshop for students and young professionals
- Support a scholarship



## INVESTING IN A NEW ERA OF INNOVATION!

WE'RE BUILDING A **CULTURE OF INNOVATION, COLLABORATION, AND ENTREPRENEURSHIP** AT THE CULLEN COLLEGE TO HELP FIND **SOLUTIONS** TO THE WORLD'S MOST PRESSING PROBLEMS.

- Joseph W. Tedesco, Ph.D., P. E., Elizabeth D. Rockwell Dean and Professor

ULTIMATELY, I'D LOVE FOR **DESIGN AND STUDENT INNOVATION** TO BE A CULTURE PIECE OF THE ENTIRE UNDERGRADUATE PROGRAM AT THE CULLEN COLLEGE.

- Dr. Dan Burleson, Director, Engineering Student Innovation Design Experience (ESIDE)

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Instead of innovative and valuable **RESEARCH FINDINGS** being left on journal pages and in books, why not turn it into a product and get it into the hands of the **PEOPLE WHO NEED IT**?

DATA SCIENCE IS POISED TO BE THE DRIVING FORCE OF RESEARCH AND INNOVATION IN ENGINEERING IN THE 21ST CENTURY.

- Dr. Yashashree Kulkarni, Director, Research Computing

### UNIVERSITY of **HOUSTON** ENGINEERING

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