ENGINEERING MATERIALS FOR ENERGY, HEALTHCARE AND TECHNOLOGY
WHAT IS MATERIALS ENGINEERING?

Materials are everything. For the caveman, it was the rock – for the astronaut on the moon, it was also the rock. Materials engineers develop materials that got us from the cave to the moon, and they continue to lead the way in every area. New materials usher in new technological and economic developments. Our urgent need for new energy sources has led to increasing demands for materials that have unusual engineering properties and applications. These concerns are further compounded by growing difficulties in assuring continuous availability of various strategic materials. For these reasons, the demand for highly-skilled materials engineers has never been greater.

WHY THE UNIVERSITY OF HOUSTON?

The materials engineering graduate program offers high quality training in fundamentals and applications of technologically-relevant materials to enable successful careers in the competitive and ever changing field. Students are offered a flexible yet demanding curriculum in materials engineering to address the needs of this highly interdisciplinary field. Graduate students are taught by a diverse, interdisciplinary team of faculty who run cutting-edge research programs in areas including bio- and nano-materials, energy storage and delivery, electronic and photonic materials, and advanced polymers. Materials engineering faculty members are developing materials for nanostructured energy storage architectures, molecular biosensors for medical diagnostics, high performance electronics and optoelectronics. Students are provided opportunities to work with modern research instrumentation in state-of-the-art facilities.

WHAT CAN I DO WITH A MATERIALS ENGINEERING GRADUATE DEGREE?

Due to the urgent need for new materials to use as energy sources and in other engineering applications, career opportunities in the materials engineering field are excellent. This is especially true in the city of Houston, the Energy Capital of the World.

A 2017 salary survey produced by the National Association of Colleges and Employers found that new graduates with an M.S. in materials engineering earn an average starting salary of $74,948, with new Ph.D. graduates earning $92,000.

WHAT TYPES OF GRADUATE DEGREES DO YOU OFFER IN MATERIALS ENGINEERING?


FOR MORE INFORMATION

For more information on eligibility and admissions requirements, please visit materials.egr.uh.edu/info/program-overview