

SUBSEA ENGINEERING

SUBSEA.EGR.UH.EDU

EXPLORING THE DEPTHS
OF UNDERWATER ENERGY

UNIVERSITY of HOUSTON | ENGINEERING

WHAT IS SUBSEA ENGINEERING?

Thousands of feet below the dark ocean waters, subsea engineers shine, carrying out some of the most important and challenging work in the offshore petroleum industry. Subsea engineers have multidisciplinary knowledge and are experts on the equipment, tools and infrastructure required for harnessing energy from the depths of the sea. Ultradeep underwater production environments present unique challenges to engineers, particularly deepwater operations where temperature, pressure and corrosion test the durability of submerged equipment and tools. Most subsea engineering operations depend on automation and remote procedures to construct and repair components beneath the surface of the water.

WHY THE UNIVERSITY OF HOUSTON?

The University of Houston is the global leader of the subsea engineering field. The UH Cullen College is home to the nation's first subsea engineering graduate program and leads the international effort to standardize subsea engineering education at universities around the world. Located in the heart of the city of Houston, subsea engineering students have access to job and internship positions at the world's leading energy companies throughout the region. The subsea engineering curriculum was developed in direct response to current and future industrial workforce needs, ensuring graduates of the program are prepared to address the challenges of the world's energy needs responsibly, to exceed the evolving expectations of employees in the energy industry and sustain professional skills to be leaders in industry, academia and government.

WHAT CAN I DO WITH A SUBSEA ENGINEERING GRADUATE DEGREE?

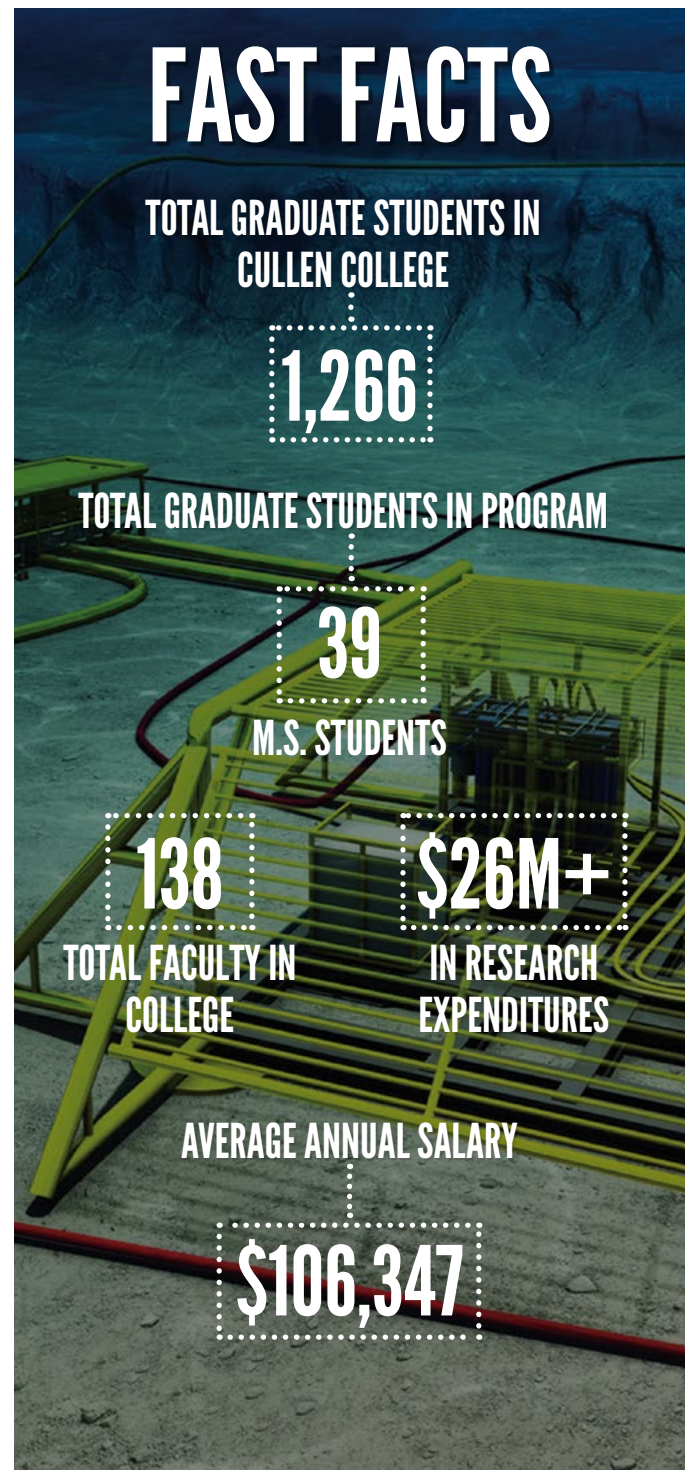
Career opportunities for subsea engineers are fantastic, especially in the city of Houston, the Energy Capital of the World. Offshore oil and gas reserves are increasingly important sources of energy and significant drivers of the international economy. There are billions of barrels of oil and trillions of cubic feet of natural gas predicted to lie within federally-controlled waters in the Gulf of Mexico alone, including off the coast of Texas. The major problem is that the reserves lie underneath 10,000 feet of water, presenting unprecedented engineering challenges. As such, nearly every energy company operating in the offshore sector employs subsea engineers, and demand for engineers with expertise in developing offshore energy resources continues to rise.

Payscale.com reports that that subsea engineers earn an average annual salary of \$106,347.

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

The UH Cullen College of Engineering offers an M.S. degree in subsea engineering, as well as graduate-level certificates in subsea engineering, advanced subsea engineering and "Data Analytics for Condition and Performance Monitoring of Engineered Systems." Students may take subsea engineering courses online or in-person.

< Image Credit: AR SubseaServices. A view of FMC Technologies' subsea services offerings. Image not to scale.



FOR MORE INFORMATION

For more information on eligibility and admissions requirements, please visit subsea.egr.uh.edu/graduate-program/master-science