

# **UH ENGINEERING PROGRAMS IN KATY**



UH Engineering's innovative and industry-relevant course offerings will continue to expand in the Katy area. All Master's level courses are worth three-credit-hours and are open to degree-seeking students and, with the consent of the respective programs, non-degree-seeking students. The following courses will be offered in the fall of 2017 and may be applied toward a Master's degree in subsea engineering based on successful admission into the graduate program.

# **APPLY NOW**

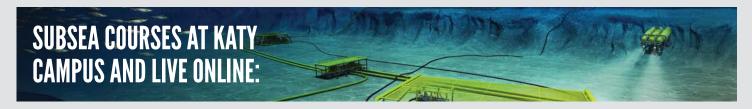
Individuals must have a bachelor's degree in engineering or a related field to apply. Applicants do not have to apply as degree-seeking students in order to enroll in the Katy courses.

To apply for the UH Engineering courses in Katy as a non-degree seeking student, please visit www.egr.uh.edu/sites/ccoe.egr.uh.edu/files/files/how\_to\_apply\_as\_non\_degree\_seeking\_student.pdf

To learn more about UH Graduate School programs, please visit www.uh.edu/graduate-school.

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

For more information, please visit www.egr.uh.edu/engineering-katy and subsea.egr.uh.edu



#### SUBS 6310: Flow Assurance

Taught by subsea engineering leader Phaneendra Kondapi, this Master's level course teaches the understanding of basic sciences, engineering and flow assurance principles and their application to the assessment, prevention and premeditation of low assurance problems in subsea systems.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

#### **SUBS 6330: Pipeline Design**

Taught by industry leader Burak Ozturk, this Master's level course provides a comprehensive overview of subsea pipelines, including pipeline design, flow assurance, material selection, pipeline installation and construction, inspection and integrity management, project management and advanced analysis methods.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

# **ECE 6355: Well Logging**

Taught by electrical and computer engineering expert Ji Chen, this Master's level course discusses logging tools including electrical resistivity, induction, acoustic, dielectric, natural gamma ray, neutron density, pulse neutron, NMR and diameter. Various production tools are also discussed along with well-log data transmission, processing and recording.

To learn more about the electrical and computer engineering department, please visit www.ece.uh.edu



# **SUBS 6320: Riser Design**

Led by William Thomas, a subsea engineering expert with nearly two decades of industry experience, this Master's level course provides a thorough study of the analysis of riser systems including global riser analysis methods, strength capacity calculations, fatigue life estimation, pipe mechanics, ocean environment loading, vessel dynamics and vortex induced vibration.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

#### **SUBS 6340: Subsea Processing**

Led by David Harrold, this Master's level course focuses on the evolving field of subsea processing in conjunction with more conventional artificial lift methods such as water injection, and gas lift.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

### **SUBS 6351: Design of BOPs**

Led by Johnnie Kotrla, this Master's level course focuses on the design of subsea blowout preventers for ultra-deepwater conditions and its role in the reliable and safe operation of subsea production systems.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

## **SUBS 6397: Guide to Engineering Data Science**

Led by Ed Marotta, this Master's level course introduces detailed data analysis and model identification methods derived directly from experimental data. This knowledge-base is required to fuse sensed data with the reduced order physics based models to create online adaptive models. The outcomes from this course include an understanding of big data analytics and its application to CPM, and reduced order modeling for performance prediction that meets best industry practices and codes.

To learn more about the subsea engineering program, please visit subsea.egr.uh.edu

For more information, please visit www.egr.uh.edu/engineering-katy and subsea.egr.uh.edu