ELECTRICAL ENGINEERING

PIONEERING
THE TECHNOLOGY
OF THE FUTURE

UNIVERSITY of HOUSTON | ENGINEERING
WHAT IS ELECTRICAL ENGINEERING?

Electrical engineering is an exciting and continually developing field – it encompasses virtually anything you can think of that requires electrical power to operate. As an electrical engineering graduate student at UH, you will become experienced with electrical engineering design, systems operation, manufacturing and management. Students may specialize in one of four areas of strength, including: control and power systems, electromagnetics and microelectronics, electronics and computers, and signals and communications. Graduate students with an interest in power systems can pursue a specialized industrial power systems track within the program, offering specialized training on industrial power systems design, power systems analysis, regulations and standards, equipment and systems protection. The industrial power systems track was established at the request of industry and its curriculum was shaped with the guidance of leaders in the power systems industry to ensure students develop the knowledge and skills required for current workforce needs.

WHY THE UNIVERSITY OF HOUSTON?

Electrical engineering graduate students at the University of Houston have the opportunity to work with and learn from faculty recognized as world leaders in their fields. These include Fellows of the IEEE and the National Academy of Inventors, multiple winners of the National Science Foundation (NSF) CAREER Awards and investigators in major research projects supported by NASA, the Defense Advanced Research Projects Agency, the National Institutes of Health, the Advanced Research Projects Agency - Energy and the NSF.

Graduate students can also take full advantage of the college’s location in Houston. Many department researchers work closely with firms in the energy industry, allowing them to address the sector’s most pressing needs. Faculty also have ongoing collaborations with physicians and researchers at Texas Medical Center institutions, enabling them to bring advances from the lab to the clinic as quickly as possible.

WHAT CAN I DO WITH AN ELECTRICAL ENGINEERING GRADUATE DEGREE?

The job outlook for electrical engineers is excellent – especially in the city of Houston, the Energy Capital of the World. Alumni of the electrical engineering graduate program work locally and overseas for Halliburton, Schlumberger, Hewlett Packard, CenterPoint Energy, Burns & McDonnell, as well as other medical, telecommunications, construction and petrochemical companies.

A 2017 salary survey produced by the National Association of Colleges and Employers found that new graduates with an M.S. in electrical engineering earn an average starting salary of $75,317, with new Ph.D. graduates earning $93,857.

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

The UH Cullen College of Engineering offers an M.S. degree (thesis and non-thesis) and a Ph.D. degree in electrical engineering, as well as a graduate-level certificate in “Power Systems and Smart Grid” or “Power Electronics and Renewable Energy Technologies.” Students have the option of taking some courses online.