Areas of Study

Graduate work in engineering may lead to the Master of Science in Engineering or the Doctor of Philosophy degree in the following majors: aerospace engineering, biomedical engineering, chemical engineering, civil engineering, electrical and computer engineering, engineering mechanics, materials science and engineering, mechanical engineering, operations research and industrial engineering, and petroleum engineering. The Master of Science in Engineering degree is also offered with a major in environmental and water resources engineering; and, through executive programs, in electrical and computer engineering, mechanical engineering, and engineering management.

A graduate certificate in Engineering Education is available to degree-seeking graduate students in the Cockrell School of Engineering. Stackable Graduate Certificates, available in Mechanical Engineering and in Petroleum Engineering, provide students with the opportunity to earn a transcript-recognized, non-degree workforce-aligned credential.

Integrated degree programs are available in biomedical engineering, electrical engineering, and mechanical engineering. The integrated programs result in the simultaneous awarding of a Bachelor of Science in Biomedical Engineering, Bachelor of Science in Electrical Engineering, or Bachelor of Science in Mechanical Engineering degree, and a Master of Science in Engineering (MSE) degree. Information about the concentrations offered in each field is given in the program descriptions.

Facilities for Graduate Work

The Cockrell School of Engineering has an outstanding research and teaching facilities on the main campus and at the J. J. Pickle Research Campus. Details are given in the individual program descriptions.

Executive Programs

Several programs allow working professionals to pursue the Master of Science in Engineering or a Stackable Graduate Certificate while employed full time. These programs are offered with alternative scheduling and modalities (weekend programs, online, and hybrid) and courses are designed to allow students to increase their career potential.

Master’s Degree students may major in Engineering Management, Mechanical Engineering, or Electrical and Computer Engineering. Stackable Graduate Certificates are available in Mechanical Engineering: Controls, Petroleum Engineering: Data Analytics, Petroleum Engineering: Fundamentals, and Petroleum Engineering: Unconventional Resources. These programs are specifically designed to meet identified workforce needs and provide engineers and STEM professionals with immediately applicable skills and knowledge to be useful for their lives and careers.

Programs offering onsite classes generally meet once a month on Fridays and Saturdays. Programs offered online are synchronous.