This industry-oriented professional degree is a coursework-based master’s degree for the student wanting to develop advanced and focused knowledge of engineering topics. Consistently one of the top-ranked mechanical engineering programs, mechanical engineering at Texas A&M is a world-renowned program with over 50 full-time faculty. To complete the degree, students register for 30 credit hours, 24 of which should be in mechanical engineering. All of the coursework can be completed online and there is no need for attending on-campus classes.

The standards of the distance learning program for admission, coursework, graduation and diploma are the exact high standards Texas A&M maintains for on-campus learning. Students earn exactly the same degree as if they studied on campus in College Station, Texas and the diploma will not say “distance learning.”

**Specializations**

- Mechanics including Biomechanics and Solid Mechanics
- Materials and Manufacturing including Nano-scale Manufacturing and Polymer and Metallic Materials
- Dynamics and Control including Robotics and Mechatronics
- Design including Product Design, Systems Optimization and Systems Realization
- Thermal Fluid Science including Combustion, Energy Systems and Heat Transfer

**Overall educational objectives**

- Give a deeper understanding of mathematics, science and engineering for industrial and research and development (R&D) applications
- Help to identify, formulate and solve advanced engineering and R&D problems
- Provide an ability to use advanced techniques, skills and engineering tools required for engineering and scientific practice
- Give an ability to design an advanced engineering component or system to meet desired needs with realistic constraints