

AEROSPACE ENGINEERING, BS

As an aerospace engineering major, you will learn how to design and analyze aerospace systems and subsystems. The program covers both atmospheric flight (aeronautics) relevant to airplanes or drones, as well as space flight (astronautics) pertinent to rockets or satellites. You will also have the opportunity to broaden your expertise in areas as wide-ranging as thermal systems, controls, computational mechanics, aerospace structures, manufacturing, and many more.

Throughout the program, you will build a strong foundation in core engineering disciplines while developing problem-solving skills essential for real-world applications. The program has a strong focus on modeling, simulation, and computing for aerospace systems. In addition, it also offers extensive opportunities for hands-on learning, including:

- required laboratories in mechanics of materials, aerodynamics, and flight controls (flight simulator). Optional laboratories in manufacturing, measurements, vibrations, mechatronics, and more as part of the undergraduate curriculum.
- a two-semester senior design capstone course, in which you will work in teams to design solutions to aerospace engineering challenges, with projects focused on the conceptual and preliminary design of aircraft and/or spacecraft, including hands-on prototyping.
- access to state-of-the-art makerspace and workshops.
- participating in world-class research, collaborating with graduate students and researchers in our faculty's labs.
- getting involved in student organizations and competition teams.

An aerospace engineering degree opens doors to a variety of careers. You will benefit from a large network of alumni, many of whom have been successful in the aerospace industry and beyond, including in other engineering disciplines, finance, healthcare, law, or business.