## MECHANICAL AND AEROSPACE ENGINEERING

## **Graduate Programs**

The School of Mechanical and Aerospace Engineering offers programs leading to the degree of Master of Science and Master of Engineering in Mechanical and Aerospace Engineering, and the degree of Doctor of Philosophy in Mechanical and Aerospace Engineering. The Master of Science and the Doctor of Philosophy degrees offer an option in Unmanned Aerial Systems and prepare the graduate for research and development positions in industry and government, or for the teaching profession in engineering. They are distinguished by the incorporation of a research component.

The Master of Engineering degree is a coursework only degree that prepares the graduate for technical leadership positions in industry and government.

Students may select coursework and participate in research or design projects in the following areas: aerospace & mechanical thermal systems, dynamics & controls, fluid mechanics, solid mechanics, mechanics of materials, materials & manufacturing and unmanned & aerospace systems integration, and design. Students are encouraged to take courses in mathematics and science and in other fields of engineering which fit into their programs.

## **Admission Requirements**

Admission to the Graduate College is required of all students pursuing the MS, ME, or PhD degree. Graduation from a mechanical or aerospace engineering curriculum accredited by ABET, with scholastic performance distinctly above average, qualifies the student for admission to the School of Mechanical and Aerospace Engineering as a candidate for the MS, ME, and PhD degrees. Graduates from disciplines other than mechanical or aerospace engineering may be admitted if an evaluation of their transcripts by the School of Mechanical and Aerospace Engineering indicates they are prepared to take graduate-level coursework in mechanical or aerospace engineering or can be expected to do so after a reasonable amount of prerequisite work.

## **Degree Requirements**

All degree programs follow an approved plan of study designed to satisfy the individual goals of the student, while conforming to the general requirements of the School of Mechanical and Aerospace Engineering and the Graduate College.

The Master of Science degree program requires 24 credit hours of approved graduate-level coursework and a suitable research thesis of six credit hours. The Master of Engineering degree requires 30 credit hours of approved graduate-level coursework and 3 hours of capstone experience coursework.

The Doctor of Philosophy degree requires a minimum of 60 credit hours beyond the master's degree consisting of 24-30 hours of formal coursework, 6 hours of Preliminary Examination credit and 24-30 hours of dissertation research credit. Qualified students may also enter the Ph.D. program directly with a Bachelor of Science degree. The direct to Ph.D. program requires a minimum of 90 credit hours beyond the Bachelor of Science degree consisting of 48-54 hours of formal coursework, 6

hours of Preliminary Examination credit and 30-36 hours of dissertation research credit.