PROPOSAL: Create the Ph.D. in Aerospace Engineering

Background

The Graduate Studies Council of the Faculty Senate has approved the creation of the Ph.D. in Aerospace Engineering offered by the Department of Mechanical and Aerospace Engineering in the College of Engineering and Applied Sciences.

The Aerospace Engineering Ph.D. program builds upon the existing Mechanical Engineering Ph.D., addressing industry-specific needs and growing student interest. It attracts top-tier talent, fosters innovation in space exploration and next-generation aerospace technologies, and enhances funding opportunities from NASA, the U.S. Air Force, and leading private-sector companies. As aerospace technology rapidly evolves, this program strengthens the university's position as a research leader, encourages interdisciplinary collaboration, and boosts its global competitiveness. By leveraging existing resources, it meets the increasing demand for experts in aviation, space, and defense, ensuring the university plays a pivotal role in shaping the future of aerospace engineering.

Currently, aerospace-focused faculty within the department supervise doctoral students under the Mechanical Engineering Ph.D. program, with graduates earning a degree in Mechanical Engineering. However, a significant number of students seek a dedicated Aerospace Engineering Ph.D., often opting to attend other institutions that offer such a program. With the rapid expansion of the aerospace industry - especially in the New Space Era - establishing a Ph.D. program in Aerospace Engineering is both timely and essential to retaining top students and meeting industry demands.

Recommended Action

Create the Ph.D. in Aerospace Engineering.