

M.S. in Software Engineering

The Master of Science in Software Engineering prepares students to lead at every stage of the software development life cycle, with direct applications in aerospace, defense, healthcare, and beyond. The keystone of the program is hands-on work with sophisticated, high-stakes systems like those found in aircraft, spacecraft, and medical devices.

Housed in the Department of Electrical Engineering and Computer Science in the College of Engineering, the M.S. in Software Engineering is designed to allow students to enhance their careers and work on the cutting edge of modern software development. The process-centered, quantitative approach to coursework in this degree program equips students with the technical tools and techniques needed for successful software architecture and design.

The program emphasizes the engineering of real-time embedded software systems used in applications such as FAA air traffic control computer systems, aircraft avionics, and aerospace software. Students will graduate with the ability to apply software engineering processes (e.g., SCRUM, PSP, TSP, and CMM) to the development of highly reliable software-intensive systems.