MASTER OF SCIENCE IN SYSTEMS ENGINEERING

Graduates of the Master of Science in Systems Engineering are capable of designing and managing complex multidisciplinary engineering systems with a rigorous systems engineering approach. The research component of the thesis- and project-based M.S. programs equip students with cutting edge skills in specific focus areas, preparing them for future career opportunities. Choose from more than 40 course options, and attend online, in-person, or hybrid. Engage with industry-connected professors and peers on transformative engineering projects.

- The Plan A degree prepares students for research, offering skills applicable in academia and industry. Students will design and manage complex multidisciplinary engineering systems using a rigorous systems engineering approach. A thesis enables students to focus on a specific area of their choice, preparing them for the next level of graduate education or a robust career in industry.
- The Plan B degree prepares students for careers as researchers or practitioners in industry. It requires completion of a project with formal report. The required final project will focus on a specific problem or system of their choice, and will demonstrate readiness for advancement in an industry career.

Learning Objectives

Upon successful completion, students will be able to:

1. Effectively analyze, design, or implement integrated system solutions.
2. Effectively use SE tools such as modeling and simulation of a system.
3. Analyze systems interfaces between stakeholder, technical domains effectively and efficiently.
4. Exemplify a variety of roles in multi-disciplinary teams including systems engineer, technical expert, and leader.
5. Contribute technically to the systems engineering field of knowledge, governance, policy, program management, or planning.