M.S. in Space Systems

The Master of Science in Space Systems (MSSS) program provides technically oriented graduate students with the skills and knowledge they will need to advance their careers in space systems program management. MSSS begins by providing students with the necessary background in the economics, policy, and systems engineering skills needed to become a successful program manager. Building on this foundation, the majority of the coursework provides students with the experience of developing real world space systems. Students will learn to develop, design, and execute the architecture of trade studies necessary for successful system development.

Program-Specific Criteria

Admissions Criteria

In addition to the established admissions requirements, applicants for admission to the Master of Science in Space Systems degree program must meet the following criteria:

- Provide evidence of an undergraduate STEM degree. STEM field of study is a field of study *"included in the Department of Education's Classification of Instructional Programs (CIP) taxonomy within the 2-digit series containing engineering, biological sciences, mathematics, and physical sciences, or a related field. In general, related fields will include fields involving research, innovation, or development of new technologies using engineering, mathematics, computer science, or natural sciences (including physical, biological, and agricultural sciences)."*

EXCEPTIONS: Applicants with degrees from all other disciplines may be considered for conditional admission under circumstances determined by the Admissions Office and/or Program Coordinator. Conditions of admission will be determined on a case-by-case basis.

Estimated Cost of Attendance

Students will:

- Design a range of space systems using systems engineering principles.
- Create strategies for developing space systems which optimally achieve mission, financial and organizational goals.
- Synthesize strategic critical thinking skills to effectively determine tradeoffs based on sound technical and business judgement.
- Analyze the technical characteristics and performance parameters of current and future systems and components in the context of a space system.

DEGREE REQUIREMENTS

Core/Major

SPAC 500	Overview of the Space Ecosystem	3
SPAC 520	Space Technology and Systems	3
SPAC 525	Space Law and Policy	3
SYSE 500	Fundamentals of Systems Engineering	3
MSSS 550	Space Transportation Systems	3
MSSS 530	Earth Observation Systems	3
MSSS 560	SATCOM Systems	3
MSSS 570	Space Science Systems	3
SPAC 515	Cybersecurity Applications in Space	3
MSSS 540	Human Spaceflight Systems	3
Total Credits		**30**