

M.S. in Aviation Safety

Safety is at the very heart of all we do in aviation. Our industry has an enviable safety record, but we can never take that for granted. It takes knowledge, experience, and hard work to keep the public's trust. The Master of Science in Aviation Safety (MSAVS) will give you the skills and abilities you need to advance the safety and efficiency of our aviation system today, while meeting the challenges of tomorrow.

As a student in the Master of Science in Aviation Safety program, you will learn the theory and application of system safety and human performance, as well as the practical management of safety programs, safety data analysis, and accident investigation. You will hone your critical thinking, teamwork, and communication skills while learning from experts in the field and collaborating with students from around the world. Subject areas include industrial and ground safety and emergency management as well as flight operations safety. This program will prepare you for a career in operations or safety with traditional employers such as major airlines, or with new entrants in uncrewed systems or commercial space.

Students interested in pursuing careers in research or academia have the option to complete a thesis.

View information for BS in Aviation Safety (BSAS) students who wish to continue on to the M.S. in Aviation Safety (MSAVS) degree by enrolling in the BSAS-MSAVS 4+1 program.

Estimated Cost of Attendance

Students will:

- Apply knowledge of mathematics, science, and applied sciences at various levels of education.
- Interpret data provided from various sources.
- Make positive contributions and function on multi-disciplinary teams.
- Understand professional and ethical responsibility as it applies to the aviation industry.
- Communicate effectively using technical writing and verbal communication skills.
- Recognize the need for, and be able to engage in, lifelong learning.
- Reflect knowledge of contemporary issues affecting the aviation industry.
- Use the techniques, skill, and modern technology necessary for professional practice.
- Possess an understanding of the national and international aviation environment.
- Apply pertinent knowledge in identifying and solving problems.
- Possess knowledge and understanding of business sustainability as it applies to aviation industry issues.
- Apply advanced qualitative and quantitative problem-solving skills.

DEGREE REQUIREMENTS

Core/Major

ASCI 604	Human Factors in the Aviation/Aerospace Industry	3
ASCI 645	Airport Operations and Management	3
MSAS 611	Aviation/Aerospace System Safety	3
MSAS 612	Aviation/Aerospace Industrial Safety Management	3
MSAS 615	Aviation/Aerospace Accident Investigation and Analysis	3
MSAS 621	Aviation/Aerospace Safety Program Management	3
MSAS 627	Aviation Safety Data Management and Analysis	3
RSCH 665	Statistical Analysis	3

SFTY 540	Disaster Preparedness and Emergency Response	3
ASCI 693	Current Research Problems in Aviation/Aerospace	3
Total Credits		30

Thesis Option

RSCH 700A	Thesis I	3
RSCH 700B	Thesis II	3
Total Degree Requirements (Thesis Option)		36