B.S. Aerospace Systems and Mission Design

Students who attain a Bachelor of Science degree with a major in Aerospace Systems and Mission Design will be equipped with a solid foundation in technical and operational concepts along with associated technology to support a career working with aerospace systems. The curriculum is underpinned with a comprehensive foundation of scientific principles and methods to support students interested in overall **space mission conceptualization, design and integration of space systems, and spaceflight mission operations** and support throughout the entirety of the life cycle. In addition to industry opportunity upon graduation, the B.S. Aerospace Systems and Mission Design offer the graduate a solid foundation from which to continue graduate work in a variety of domains related to aerospace operations and technical management.

Student Outcomes

1. Graduates will develop a comprehensive understanding of aerospace systems using current technologies to conduct aerospace related systems and operational analysis coupled with professional technical and scientific communication skills.
2. Graduates will possess the knowledge, ethical principles, and expertise necessary to effectively communicate complex information and solve problems within the aerospace domain.
3. Graduates will develop **critical thinking skills, planning, decision-making, and effective communication abilities, integrating technical and scientific knowledge and methods** to address challenges in a professional context.
4. Graduates will evaluate and integrate the significance of regulatory compliance, understanding its influence on global aerospace operations while addressing interconnected technical, environmental, and human factors.
5. Graduates will apply innovative approaches to **ensure long-term sustainability and reliability, emphasizing the responsible use of resources in the aerospace domain**.

Why Choose MSU Denver's Aviation and Aerospace Program

- With over 50 years of experience, the Aviation and Aerospace Department is committed to hands-on, student-centered learning, fostering strong legislative, industry, and philanthropic support to expand its aviation and aerospace programs to meet the evolving demands of students and the industry.
- MSU Denver's College of Aerospace, Computing, Engineering, and Design provides quality education preparing students for dynamic and successful careers in aerospace.
- Engage with cutting-edge technology that supplements your learning, including virtual and mixed reality.
- Learn from faculty with industry experience to understand the transferability of abstract concepts to real-world applications.
- Join and lead student organizations such as the Society of Hispanic Professional Engineers (SHPE), Drone Soccer, Aerobatics Team, Alpha Eta Rho, Women in Aviation, and others to expand your network connections.
- Enhance your expertise with minors and certificates in Unmanned Aircraft Systems (UAS), Airport Management, Space Commercialization, and other specialized fields to further refine your skills and gain additional knowledge to stand out to aerospace employers.

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