



B.S. Aviation & Aerospace Science – Air Traffic Control Concentration

MSU Denver's Aviation and Aerospace Department in the College of Aerospace, Computing, Engineering, and Design has been educating and training future professional aviation and aerospace pilots, controllers, aerospace operators, and executives for over 50 years. Our student-centered department focuses on high-quality, real-world education and curriculum focusing on your aviation and aerospace professional career.

Why MSU Denver's Air Traffic Control Concentration

- FAA Designated Air Traffic-Collegiate Training Initiative (AT-CTI) program. MSU Denver is one of 31 universities selected to offer degrees that teach basic courses in air traffic control and aviation administration. The program is designated to provide qualified candidates for developmental air traffic control specialist positions.
- This concentration also provides the required courses needed to obtain the Airport Management Certificate. No additional classes are needed.
- Become a member and leader in various student organizations, including the Aerobatics Team, Alpha Eta Rho, American Association of Airport Executives, America Institute of Aeronautics and Astronautics, Glider Club, Latino Pilots Association, National Gay Pilots Association, Organization of Black Aerospace Professionals, Precision Flight Team, Professional Asian Pilots Association, Women in Aviation, and more.
- Additional minor and certificate offerings, such as Unmanned Aircraft Systems (UAS), Space Commercialization, and many more, are available.

Aviation & Aerospace Science B.S. - Air Traffic Control Concentration
Fall 2025 Catalog (Effective curriculum started in fall semester of 2025)

First Year		
Fall: 17 Credits	AES 1100 (4) Private Pilot Ground	
	AES 1400 (3) Aviation Weather	
	Social & Behavioral Science (3) ESSJ or GD recommended	
	Quantitative Literacy (4) Algebra-based math course recommended	
	AES Elective (3)	
Spring: 15 Credits	AES 1710 (3) Instrument Flight Sim I	
	Arts & Humanities (3)	
	Written Communication (3)	
	Natural & Physical Science (3)	
	AES Elective (3)	
Second Year		
Fall: 13 Credits	AES 2200 (4) Fundamentals of Air Traffic Control	
	Written Communication (3)	
	Natural & Physical Science (3)	
	AES Elective (3)	
Spring: 16 Credits	AES 2120 (4) Instrument Pilot Ground	
	Oral Communication (3)	
	Social & Behavioral Science (3)	
	AES Elective (3)	
	AES Elective (3)	
Third Year		
Fall: 15 Credits	AES 3220 (3) Aviation and Aerospace Law	
	AES 3850 (3) Human Factors and Physiology of Flight	
	AES 3880 (3) Aviation Security	
	Historical (3) ESSJ or GD recommended	
Spring: 15 Credits	AES Elective (3)	
	AES 4200 (3) Airport Planning & Management I	
	AES 4860 (3) Aviation Safety	
	Arts & Humanities (3)	
	AES Elective (3)	
Fourth Year		
Fall: 15 Credits	AES 4870 (3) Aviation Safety Program Management	
	AES 4910 (3) Aviation & Aerospace Strategic Planning	
	AES Elective (3)	
	General Elective (3)	
	General Elective (3)	
Spring: 14 Credits	AES 4100 (3) Advanced Air Traffic Control	
	AES 4210 (3) Airport Planning & Management II	
	AES 4230 (3) General & Business Aviation Operations	
	AES 4930 (3) Professional Flight Standards (Capstone)	
	General Elective (2)	

This concentration also provides the required classes to earn the Airport Management Certificate to your diploma without taking additional courses. Please contact an aviation advisor to add the Aviation Management Certificate to your degree plan. Consider adding an additional Certificate like UAS.

Note: Specific degree requirements are delineated in the applicable academic catalog under which your program declaration is governed. Consult with an advisor from the Aviation and Aerospace Science Department to confirm compliance with all degree requirements.