



METROPOLITAN STATE UNIVERSITYSM
OF DENVER
College of Professional Studies

Aviation & Aerospace Science B.S. - Professional Flight Officer Concentration

Minor (not required)

Fall 2020 Catalog Year

First Year		
Fall: 16 Credits	AES 1100 (6) Aviation Fundamentals	
	AES 1400 (3) Aviation Weather (prereq or coreq AES 1100)	
	Written Communication (3)	
	MTH 1110 (4) College Algebra for Calculus OR MTH 1112 (4) College Algebra thru Modeling OR MTH 1310 (4) Finite Math-Mgmt & Social Sciences	
Spring: 15 Credits	AES 1710 (3) Instrument Flight Simulation I (prereq or coreq AES 1100)	
	Written Communication (3)	
	Oral Communication (3)	
	Natural & Physical Sciences (3)*	
	Arts & Humanities (3)	

Third Year		
Fall: 16 Credits	AES 3000 (3) Aircraft Systems and Propulsion	
	AES 3530 (3) Aerodynamics	
	AES 3650 (4) Advanced Flight Technologies	
	AES 3880 (3) Aviation Security	
	AES 1040 (3) Intro to Unmanned Aircraft Systems OR AES 2050 (3) Aviation & Aerospace History & Development	
Spring: 15 Credits	AES 3710 (3) Multi-Engine Flight Simulation I	
	AES 3850 (3) Human Factors & Physiology of Flight	
	AES 4040 (3) Aircraft Performance	
	AES 4370 (3) Advanced Navigation Systems	
	General Elective (3)	

Second Year		
Fall: 17 Credits	AES 2120 (4) Instrument Fundamentals	
	AES 2200 (4) Fundamentals of Air Traffic Control	
	Arts & Humanities (3)	
	Natural & Physical Sciences (3)*	
	Social & Behavioral Sciences (3)	
Spring: 15 Credits	AES 2130 (3) Commercial Flight Operations	
	AES 2710 (3) Instrument Flight Simulation II (U.S. citizenship or TSA approval required: ask for details)	
	AES 2220 (3) Flight Dispatcher and Load Planning	
	Historical (3) MC or GD Recommended	
	Social & Behavioral Sciences (3)	

Fourth Year		
Fall: 13 Credits	AES 3550 (4) FAA Instrument Certification-Ground School	
	AES 4710 (4) Turboprop Flight Simulation	
	AES 4910 (3) Aviation & Aerospace Strategic Planning	
	General Elective (2)	
Spring: 13 Credits	AES 4860 (3) Aviation Safety	
	AES 4930 (3) Professional Flight Standards Seminar	
	AES 4935 (4) Advanced Commercial Aircraft Systems	
	General Elective (3)	

*While any approved Natural & Physical Sciences courses will be accepted, the department recommends PHY 1000: Intro to Physics

*In addition to coursework, students must have an FAA Commercial Pilot Certificate with an Instrument Rating and either FAA Flight Instructor Certificate (CFI) or FAA Advanced Ground Instructor (AGI) & Instrument Instructor Certificates (IGI) before graduation