



**METROPOLITAN STATE UNIVERSITY**  
**OF DENVER**  
**College of Professional Studies**

Aviation & Aerospace Science B.S. - Aerospace Operations Concentration  
 Minor (not required)  
 Fall 2019 catalog year

First Year	
Fall: 16 Credits	AES 1100 (6) Aviation Fundamentals
	AES 1040 (3) Intro to Unmanned Aircraft Systems <b>OR</b> AES 1050 (3) Intro to Space
	Written Communication (3)
	MTH 1110 (4) College Algebra for Calculus <b>OR</b> MTH 1112 College Algebra thru Modeling (4) <b>OR</b> MTH 1310 (4) Finite Math-Mgmt & Social Sciences
Spring: 15 Credits	AES 1400 (3) Aviation Weather
	AES 1710 (3) Instrument Flight Simulation I
	Written Communication (3)
	CAS 1010 (3) Public Speaking <b>OR</b> CAS 1710 (3) Interpersonal Communication
	PHI 1030 (3) Intro to Ethics
Second Year	
Fall: 16 Credits	AES 2607 (3) Intro to Aerospace Systems Simulation
	AES 2200 (4) Fundamentals of Air Traffic Control
	Social & Behavioral Sciences I (3)
	Natural & Physical Sciences (3)
	Arts & Humanities (3)
Spring: 15 Credits	AES 2050 (3) Aviation & Aerospace History and Development
	AES 2220 (3) Flight Dispatcher and Load Planning
	Social & Behavioral Sciences II (3)
	Natural & Physical Sciences (3)
	Historical (3) MC or GD recommended

Third Year	
Fall: 15 Credits	AES 3000 (3) Aircraft Systems & Propulsion
	AES 3600 (3) Space Flight Operations I
	AES 3850 (3) Human Factors & Physiology of Flight
	General Elective (3)
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Spring: 15 Credits	AES 3607 (3) Orbital Mechanics & Aerospace Systems Sim <b>OR</b> AES 3610 (3) Elements of Spacecraft Design I
	AES 4601 (3) Space Flight Operations II
	AES 3880 (3) Aviation Security
	BUS 1950 (3) Business Communication <b>OR</b> JMP 2610 (3) Intro to Technical Writing
	General Elective (3)
Fourth Year	
Fall: 15 Credits	AES 4602 (3) Aerospace Commercialized Operations <b>OR</b> AES 4620 (3) Elements of Spacecrafts Design II
	AES 4860 (3) Aviation Safety <b>OR</b> AES 4870 (3) Aviation Safety Program Management
	AES 4200 (3) Airport Planning and Management I
	General Elective (3)
	General Elective (3)
Spring: 13 Credits	AES 4210 (3) Airport Planning & Management II <b>OR</b> AES 4930 (3) Professional Flight Standards Seminar <b>OR</b> JMP 4790 (3) Senior Seminar
	AES 3620 (3) Aerospace Sys. Project & Mission Scheduling <b>OR</b> AES 4603 (3) Aerospace Op. Systems Analysis & Design
	AES 4910 (3) Aviation & Aerospace Strategic Planning
	General Elective (4)

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